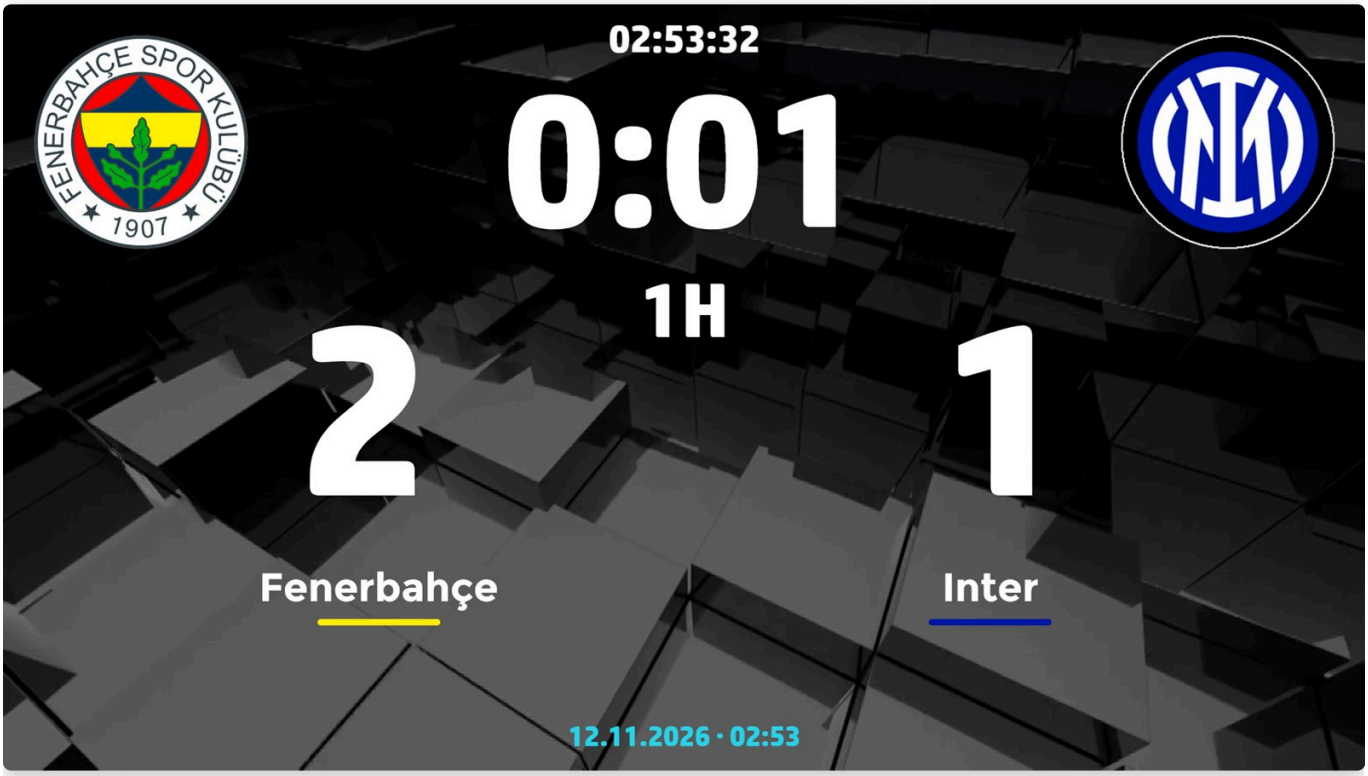
fieldBoard 7 L

Field Multi-Sport Scoreboard Software Lite

User Guide



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1 Introduction

fieldBoard 7 L (Field Multi-Sport Scoreboard Software) is a scoreboard and broadcast-graphics program for outdoor field venues: stadiums, club grounds, school fields and multi-sport parks. One operator PC runs the game clock, the scores, the cards and the shoot-outs and drives the LED wall in the ground.

The program belongs to the multiBoard7 family. It uses the same main window, Info page, Screens, Teams, Outputs, Designs and Settings as the other multiBoard7 products; those parts are described in the shared chapters of this guide. The chapters after them describe each field sport in detail: its rules as the program implements them, its Game panel control by control, every menu and dialog the panel opens, every output screen and the buttons of the remote control.

Sport	Rule presets (disciplines)	Engine
Football (soccer)	Football	Timed, count-up clock with added time
Rugby	Rugby Union, Rugby League, Rugby Sevens, Touch / Tag Rugby	Timed, count-up clock with added time
American Football	American Football	Timed, count-down clock, play clock, downs
Gaelic Football	Gaelic Football Inter-county, Gaelic Football Club	Timed, count-up clock, goals-points display
Hurling	Hurling, Camogie	Timed, count-up clock, goals-points display
Hockey	Field Hockey	Timed, count-down quarters, timed cards
Lacrosse	Field Lacrosse, Women's Lacrosse, Lacrosse Sixes	Timed, count-down clock, shot clock, timed penalties

A rule preset holds everything that belongs to the rules: number and length of the periods, clock direction, extra time, score types and their values, cards and their sin-bin times, timeouts, shot or play clock and the shoot-out. You pick the sport and the preset with the sport picker; the Game page then builds the control panel for exactly that preset – a rugby panel has T5 / C2 / PG3 / DG3 / PT7 buttons and sin-bin timers, a lacrosse panel has a shot clock and timed penalties. Period lengths and card times can be changed per preset in **Time Settings**; the changes are kept for that discipline.

Each sport comes with factory board designs that you can copy and change in the design editor (see Board Designs). Each sport also keeps its own teams and players, designs and keyboard shortcuts, so switching from Gaelic football to lacrosse and back loses nothing.

The board output. St (Standard, LED) is the full scoreboard for the LED wall or a TV in the ground. It shows the game board, team lists, goals, cards, results, announcements and the clips of the Media Player, and goes full screen to any monitor or onto the exact pixel area of an LED sender card (see Outputs and Sending the Board to the LED Screen).

> **Note** **System requirements.** Windows 10 or Windows 11 (64-bit), the Microsoft .NET Framework 4.8 and the Microsoft Edge WebView2 Runtime (the boards are drawn with WebView2). A second monitor or an LED controller input is needed for a full-screen board; the remote control needs a network.

Installation. Run the fieldBoard7L setup as an administrator. Setup checks for .NET Framework 4.8 (and offers the download page if it is missing) and for the WebView2 Runtime, installs the program into **C:\fieldBoard7L**, puts a fieldBoard7L icon on the desktop and adds Windows firewall rules for the remote control and the network outputs.

Your own data – designs, teams and players, logos, media, settings, keyboard shortcuts and match journals – lives in **C:\fieldBoard7L\data** and is kept when you uninstall or update.

Activation. fieldBoard 7 L checks its licence each time it starts; follow the activation instructions that come with your purchase. The **Settings** page shows the licence state and the program version.

Pro and Lite Editions

fieldBoard 7 L is the **Lite** edition of fieldBoard 7: the same sports, rules, control panels, info graphics, designs and remote control for one LED board, without the extra outputs and video features of the Pro edition. This guide describes fieldBoard 7 L.

	fieldBoard 7 (Pro)	**fieldBoard 7 L (Lite)**
Sports, rule presets, control panels, Undo, crash restore	all	the same
Board outputs	St, Sp, Ad and CK – four windows on any monitors	St – one window
Info page, Screens page, team lists and photos	St and CK graphics	St graphics
Media Player	20 playlists and the URL list	one playlist and the URL list
Sp / Ad Media (sponsor strip, Ad slicing, banners)	yes	–
NDI output, Video Sources (camera, NDI receive, screen capture)	yes	–
Board designs: gallery and editor	all outputs	the St screens
Remote control, officials' phones, console link, UDP broadcast, keyboard shortcuts, 46 languages	yes	yes
Program folder	C:\fieldBoard7	C:\fieldBoard7L
Licence	licence of fieldBoard 7	licence of fieldBoard 7 L (the licences of the two editions are not interchangeable)

2 Quick Start

This walk-through gets a football (soccer) match on the LED wall in about ten minutes. The same steps work for every field sport.

1. Start **fieldBoard7L** from the desktop icon. The main window opens on the **Game** page with the last sport you used.
2. Click the sport button in the bottom bar (or the green discipline button above the clock) and choose the sport and the rule preset, e.g. *Football*. The control panel is rebuilt for that preset.
3. Open **Teams**, enter the event, the two team names, short names and colours, load the logos and – if you have them – the players with shirt numbers, then click **Apply**. Without team lists you can still type numbers by hand during the match.
4. Click **Time Settings** in the bottom bar and check the period length (e.g. 45:00 for senior football, shorter for youth). Click **Save**.
5. Open **Outputs**, switch on **St** and choose the monitor that feeds the LED wall (Full Screen, or the pixel area of a sender card – see Sending the Board to the LED Screen). This is done once: the board opens there by itself at every later start.
6. Back on the **Game** page, check that First Half is selected and the clock shows 0:00. Click **New Match** if a previous score is still on the panel.
7. At kick-off click the green **Start** button (or press `F1`). Football clocks normally run on; stop the clock only when the referee stops the match.
8. For a goal click the ↑ arrow of the team (type the scorer's number first if you want it credited). For a card type the number and click **Y**, **Y/R** or **R**.
9. When the fourth official shows the added time, click **+ Added Time** and type the minutes. At 45:00 the clock holds and the added time counts on the board.
10. At half-time click **Second Half** – the clock is set to 45:00 and waits for Start. Use the **Intro**, **Result** and **Announce** buttons of the St row for the team graphics and the final score (see The Info Page and Screens).
11. After the match click **New Match** to clear the panel for the next game.

> **Tip** Every action can be taken back with ↶ **Undo** in the bottom bar (`F12`). Most actions also have keyboard shortcuts and can be sent from a phone with the remote control (see Keyboard Shortcuts and Remote Control; the chapter of each sport lists its keys and remote buttons).

3 The Main Window

fieldBoard 7 L runs in one operator window. Six page tabs and the Settings tab sit on the coloured strip at the top; the **Game** page holds the control panel of the running sport, framed by the output strip on the left, the tool strip on the right and the on-air rows and bottom bar below.

The board itself is a separate window without a frame. You open it with the **St** button; where it goes (which monitor, full screen or an exact area) is set once on the Outputs page and kept for every later start.

Tabs and Side Strips

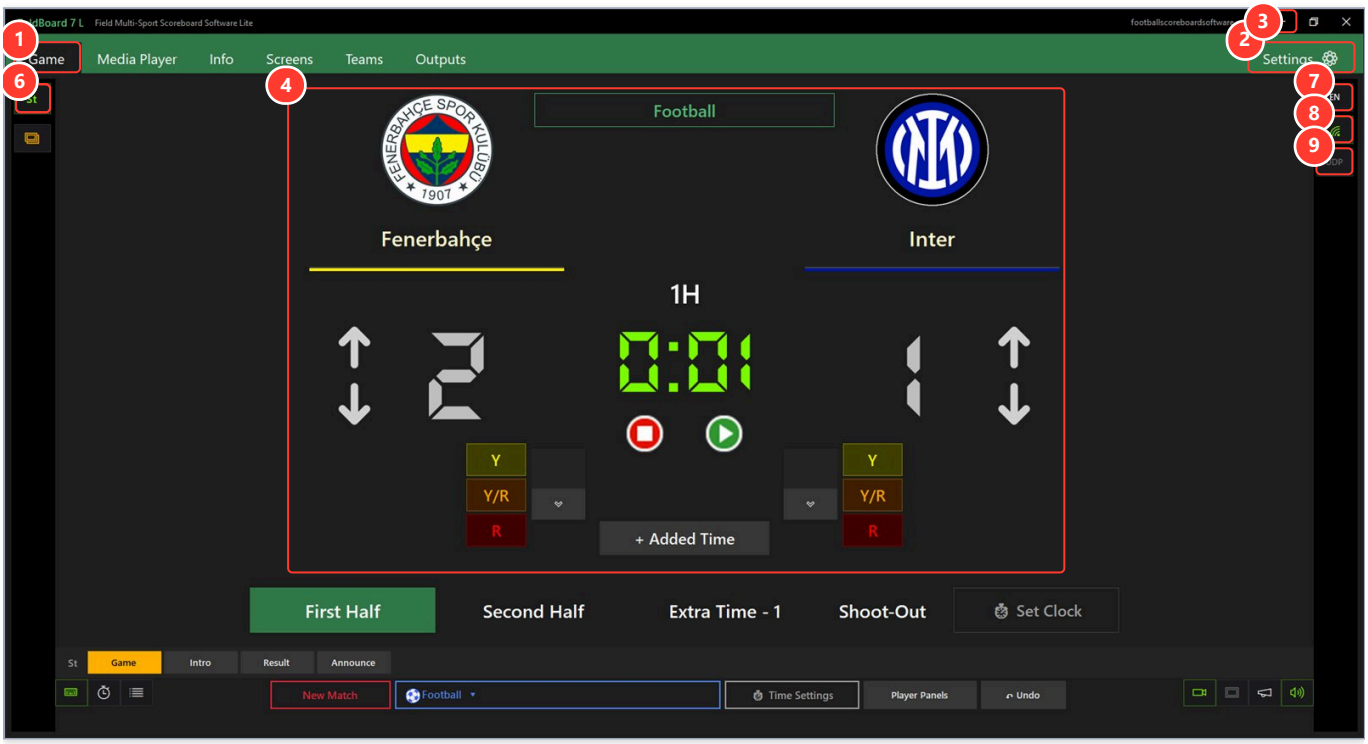


Figure 1. The Game page (Football): tabs, output strip (left) and tool strip (right)

#	Control	What it does
1	Page tabs	Switch between the pages **Game** (the control panel), **Media Player** (videos and pictures on the board), **Info** (event graphics), **Screens** (which screen the board shows), **Teams** (names, colours, logos, team lists) and **Outputs** (monitor, window position, design). The open tab has the dark colour of the page below it. Clicking **Game** while the Media Player shows a clip brings the scoreboard back.
2	Settings	Opens the Settings page: language, remote control, console and UDP integration, keyboard shortcuts.
3	Minimise / Maximise / Close	The window buttons. Drag the title bar to move the window. Closing the main window also closes all board windows.
4	Control panel of the sport	The scoreboard controls of the running sport: clock, period, scores, fouls, timeouts, penalties, sets and so on. They are explained in the chapter of each sport. The panel grows with the window, and so do the drop-down menus it opens (Card ▾, player lists, More ▾ …): their text is as large as the buttons that open them.

#	Control	What it does
5	St – Standard (LED) output	Click to open or close the **Standard** board window (the main scoreboard for the LED wall, video board or a monitor in the venue). The letters light green while the window is open. Where the window goes is set once on the Outputs page (see *Sending the Board to the LED Screen*).
6	Preview Design	Opens the design gallery: every master and own design of the sport, rendered live with the running match. One click puts a design on an output (see *Board Designs*).
7	Language	Shows the language menu (the button shows the code of the current language). The chosen language is saved and used after the next start of the program (see *Settings*).
8	Remote Control	Switches the phone / tablet remote control (the built-in web server) on or off. Lit green while the server runs; the tooltip shows the port.
9	UDP Broadcast	Switches the UDP state broadcast for LED controllers and other listeners on or off. Lit green while it runs.

On-Air Rows and Bottom Bar

Below the control panel are two rows: the on-air screens of the St output, and the bottom bar with the match commands and the tool icons.

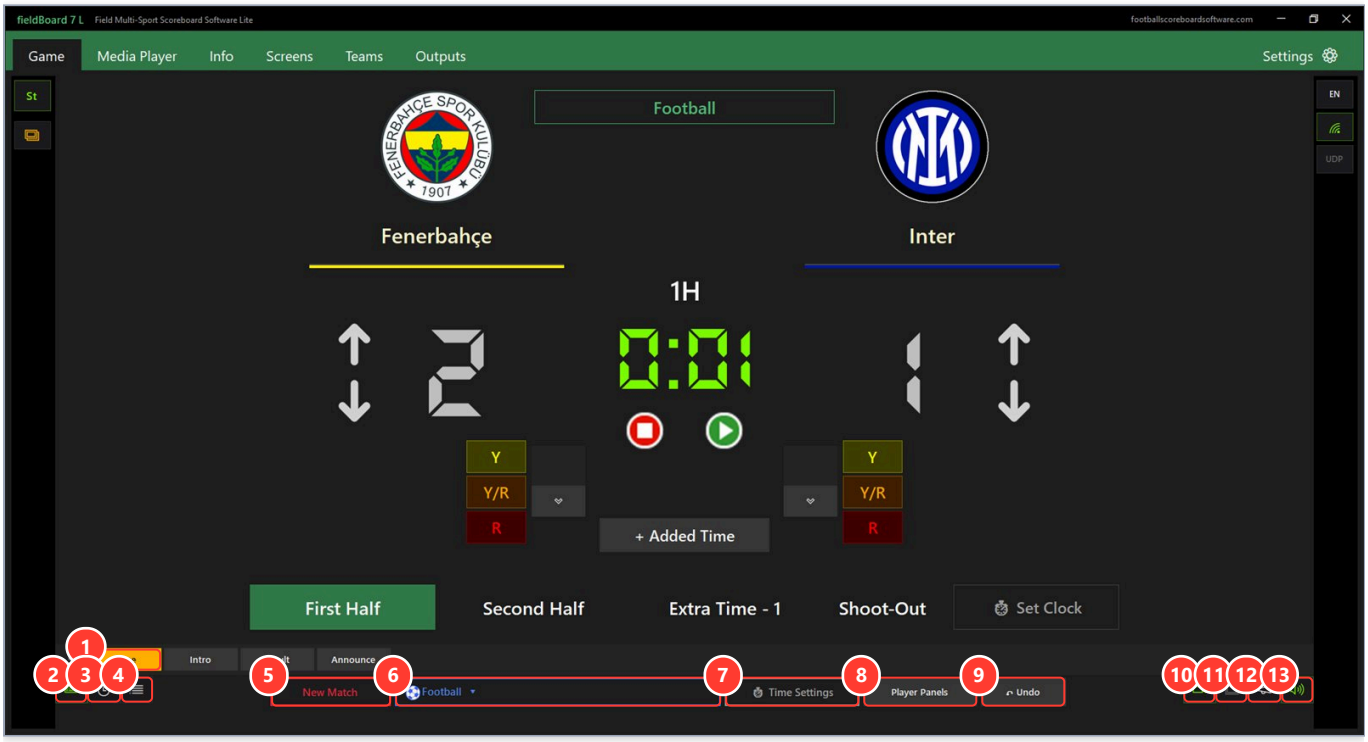


Figure 2. The Game page: on-air screens and bottom bar

#	Control	What it does
1	St screens	The screens of the Standard board: **Game** (the scoreboard) and the info screens of the design (**Intro**, **Result**, **Announce**, **Timeout** …). The screen on air is amber; click **Game** to return to the scoreboard.
2	Keyboard Shortcuts	Opens the keyboard shortcut editor. Lit green while the global shortcuts are on.
3	Time Settings (icon)	Opens the Time Settings of the discipline – the same as the **Time Settings** button.
4	Players	Opens the Teams page with the team lists.

#	Control	What it does
5	**New Match**	Starts a new match of the same sport and discipline after a confirmation. Scores, clocks and statistics are reset; teams and team lists stay.
6	**Sport · Discipline**	Shows the running sport and discipline (rule set). Click to choose another sport or discipline.
7	**Time Settings**	Period lengths and names, overtime, timeout, shot clock, team foul limit and penalty times of the discipline. Shown amber with a ***** when the times differ from the default values.
8	**Player Panels**	Switches the Standard game screen between the plain scoreboard and the scoreboard with player panels (number, name, fouls, points …). Lit amber while the player panels are shown. Only for sports with player statistics. A name that does not fit its panel is shortened to the initial and the surname before it is cut with "…".
9	**Undo**	Takes back the last change of the score, fouls, timeouts, penalties … (up to 100 steps). Keyboard: `Ctrl` + `Z`. The bottom bar has this button only in the timed sports; the other sports have their Undo on their own panel, so there is never more than one Undo button.
10	**Background Video**	Plays the background video behind the board. Without a video in *data\media\background* a file dialog asks for one first.
11	**Background Picture**	Shows a background picture behind the board. Without a picture in *data\media\background* a file dialog asks for one first.
12	**Horn**	Sounds the horn once on the PC speakers.
13	**Sound On / Off**	Switches all sounds (horn, shot clock horn, timeout signal) on or off. Lit green while the sounds are on.

> **Tip** When the panel refuses an action (for example a timeout when all timeouts are used, or Undo with nothing left to undo), the reason appears in red in the line under the bottom bar.

The Board Output

fieldBoard 7 L drives one board output, **St – Standard (LED)**: the full scoreboard and the full-screen info screens (Intro, Result, Announce, Timeout, Goal, Card, Substitution, Player Intro, Team List, Officials) for the LED wall, video board, projector or TV in the venue. The Media Player shows its videos and pictures on the same board.

Board elements that only matter at times stay off the board until they have something to show: a heading such as **Penalty**, **2 Min**, **Sin Bin**, **Card** or **Red Cards** appears only while a team has such a penalty or card (no empty "Card 0 0"), and score breakdown chips use the right number (*1 Goal*, *2 Goals*). The background video and picture (bottom bar) appear behind the board.

The Board

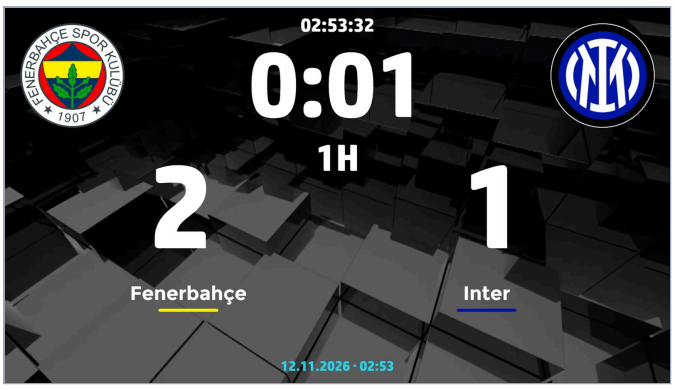


Figure 3. St – Standard (LED) board



Figure 4. The same board without the background video

Keys and Sounds in the Main Window

Key	What it does
`Space`	Starts or stops the game clock while the Game page is open (not while you type in a text box).
`Ctrl` + `Z`	Undo – the same as the Undo button (bottom bar or panel).
`F1` – `F12`, numpad	Global keyboard shortcuts of the sport (see *Keyboard Shortcuts*). They also work while another program has the focus.
`Esc`	Closes the open dialog (sport picker, Time Settings, keyboard shortcuts).

The program sounds the horn at the end of a period and of the match, a shot clock horn when the shot clock runs out, and a signal at the start and end of a timeout. Switch all sounds off with the speaker icon. To use your own horn, put a WAV file with the same name as the shipped sound (02.wav = horn, 03.wav = timeout, 04.wav = shot clock) into *data\sounds*.

4 Starting a Match

When fieldBoard 7 L starts, it opens the sport and discipline that were used last, with the team setup of that sport. Every command during the match is written to a match journal, so a match survives a power cut or a crash (see *Restoring a Match after a Crash*).

New Match

Click **New Match** in the bottom bar (set sports and some others also have it on their panel). A confirmation appears:

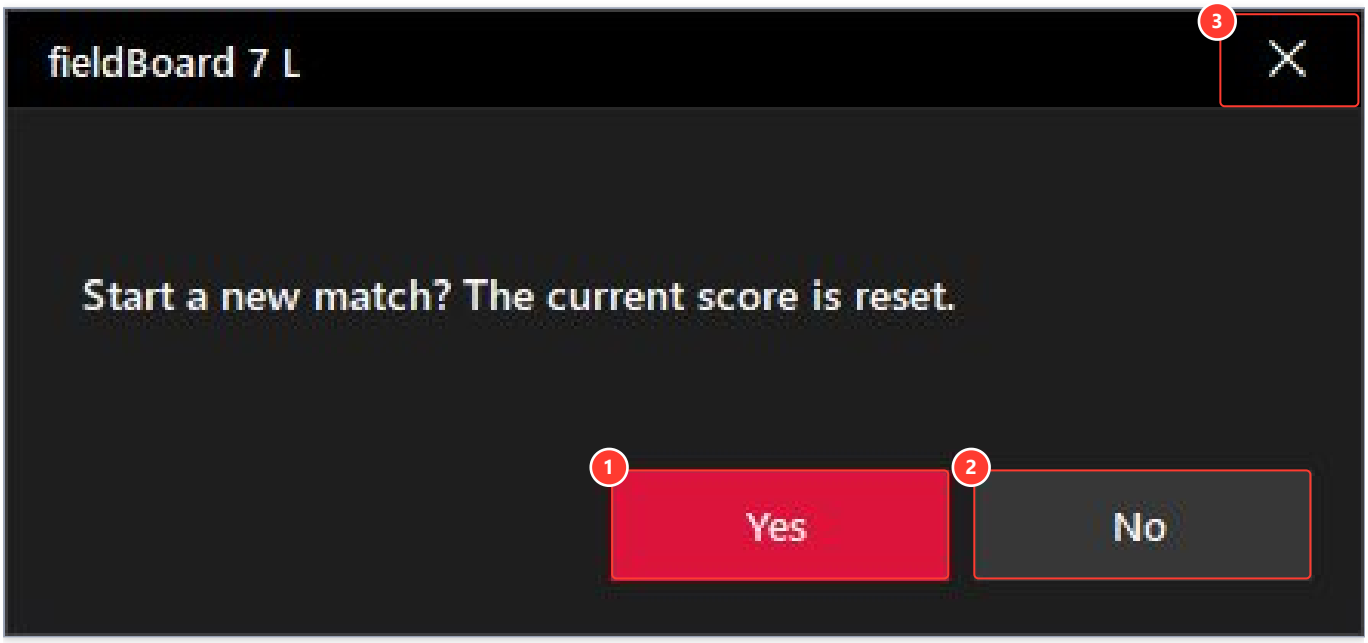


Figure 5. Confirmation of a new match

#	Control	What it does
1	Yes	Starts a new match of the same sport and discipline: scores, clocks, fouls, timeouts, penalties and player statistics are reset. Teams, colours, logos and team lists stay.
2	No	Keeps the running match.
3	Close (×)	The same as **No**. `Esc` also answers No.

> **Tip** The remote control has **New Match** in its *Match Control* section; it asks the same question on the phone.

Choosing the Sport and Discipline

Click the sport button in the middle of the bottom bar (it shows the sport and discipline, for example *Sport* · *Discipline* ▾). The picker shows every sport of fieldBoard 7 L as a tile and, below, the disciplines (rule sets) of the chosen sport.

The Sport Picker

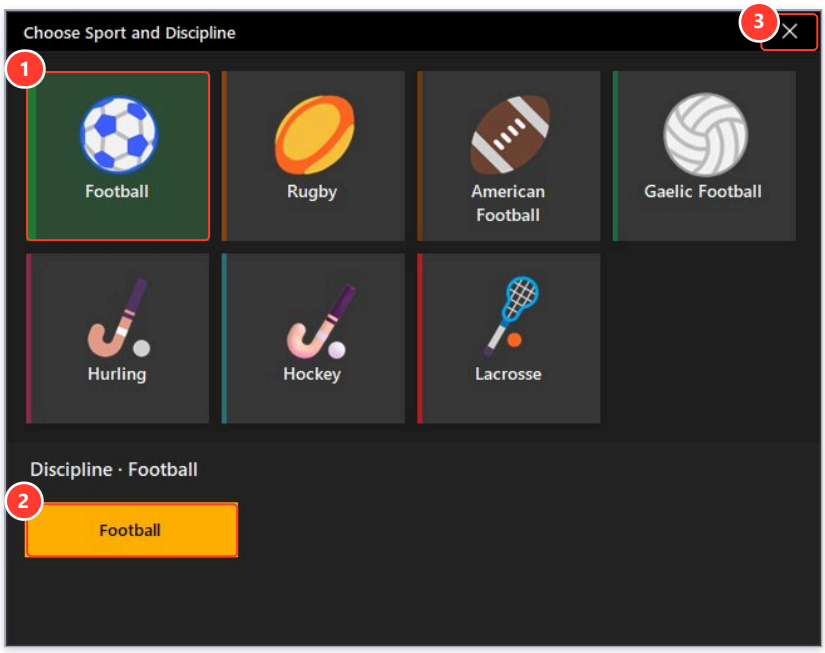


Figure 6. Choose Sport and Discipline

#	Control	What it does
1	**Sport tiles**	Every sport of fieldBoard 7 L. Click a sport to show its disciplines below. The running sport is tinted in its colour. A sport with only one discipline is chosen with one click.
2	**Disciplines**	The rule sets of the chosen sport (e.g. league, junior or international rules with their own period lengths, timeouts and limits). Click a discipline to start it. The running discipline is amber; choosing it again changes nothing.
3	**Close (×)**	Closes the picker without a change (also `Esc`).

The disciplines of every sport of fieldBoard 7 L:

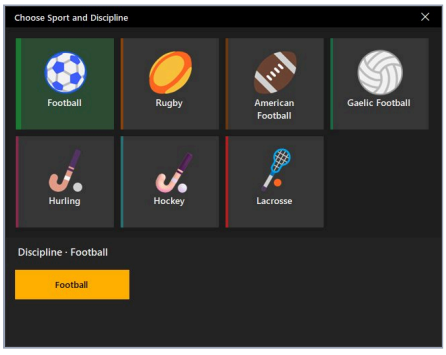


Figure 7. Football – its disciplines



Figure 8. Rugby – its disciplines

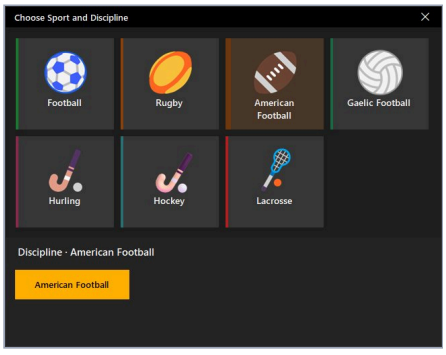


Figure 9. American Football – its disciplines

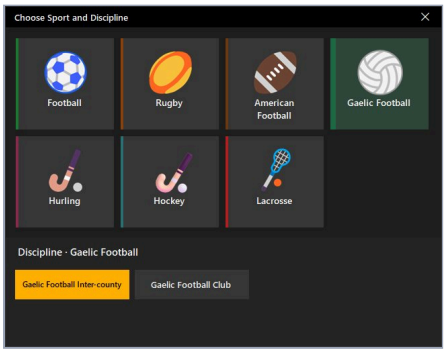


Figure 10. Gaelic Football – its disciplines

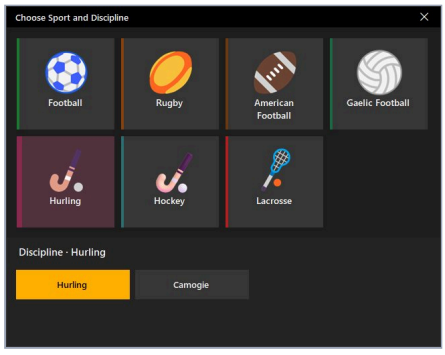


Figure 11. Hurling – its disciplines

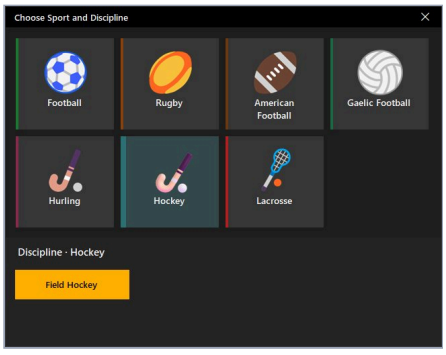


Figure 12. Hockey – its disciplines

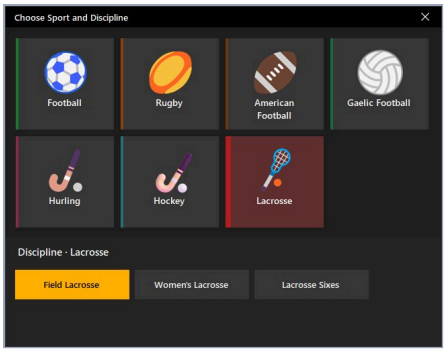


Figure 13. Lacrosse – its disciplines

Switching during a Match

If a match is in progress (a score other than 0, the clock running or a set played), the program asks before it switches. The new sport starts with its own team setup, designs and keyboard shortcuts; the choice is remembered for the next start.

Switch Confirmation

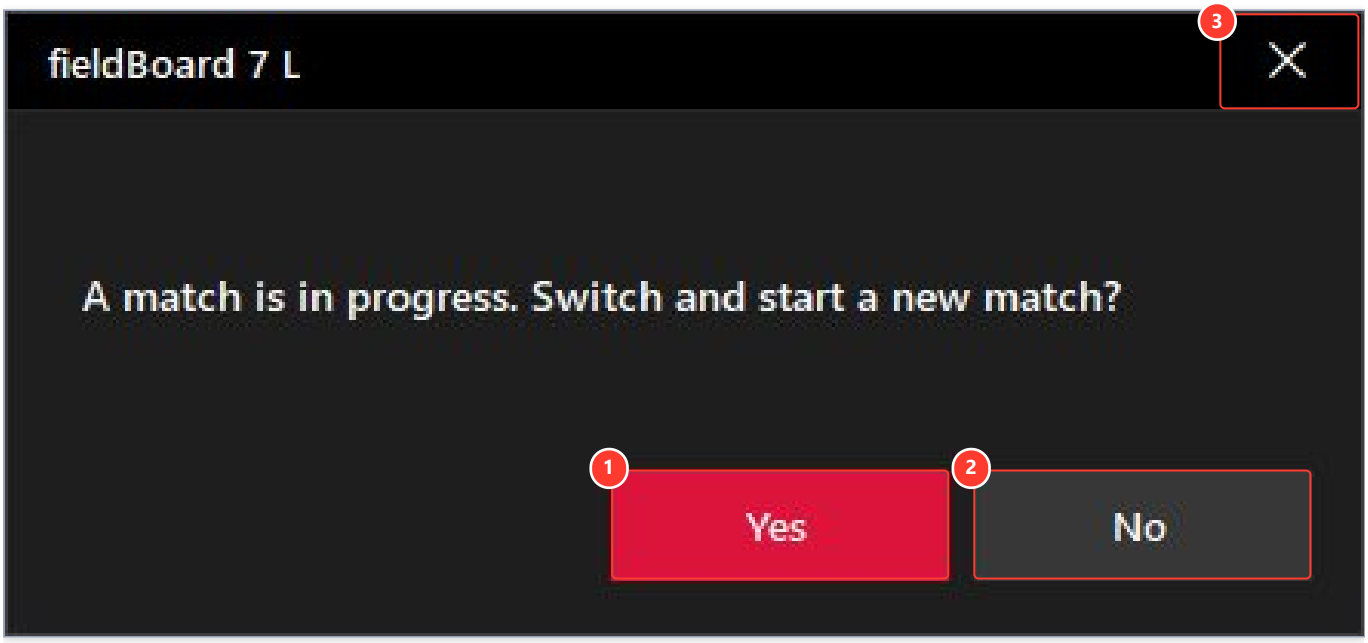


Figure 14. "A match is in progress. Switch and start a new match?"

#	Control	What it does
1	Yes	Ends the running match and starts the chosen sport / discipline with a new match.
2	No	Stays with the running match; nothing changes.
3	Close (×)	The same as **No**. `Esc` also answers No.

Time Settings

Click **Time Settings** (or the stopwatch icon at the bottom left) to change the times of the running discipline. The title bar names the sport and, when the preset has a name of its own, the discipline. The window grows with the number of rows, so the last row is always visible. The dialog only shows what the discipline has:

- **Periods** – the name of each period as the board shows it (Q1, 1H, P1 …) and its duration in m:ss.

- **Overtime** – the names of the overtime periods as the period buttons show them, separated by commas (e.g. *ET1, ET2*), and their duration. Where the preset has one overtime name such as *OT*, further overtime periods are numbered automatically (OT1, OT2 …).
- **Timeouts** – the length of a timeout.
- **Shot Clock** – full time and reset time in seconds (e.g. 24 / 14).
- **Team Fouls** – the foul limit (penalty situation / bonus).
- **Penalties** – the length of each timed penalty (e.g. 2 minutes).
- Set sports: **Sets to Win**, **Points per Set**, **Deciding Set Points**, timeout and technical timeout length.
- Cricket: **Match Format** – overs per innings, overs per bowler, days of a two-innings match, balls per over, players per side, reviews, powerplay overs and the timeout length, depending on the format.
- Swimming and diving have no time settings (the dialog says so); their rules belong to the meet and the event.

Times are typed as m:ss (plain seconds are accepted too). The Time Settings dialog of every sport, with its own rows, is shown in the chapter of that sport. The three buttons at the bottom are the same everywhere:

Button	What it does
Default Values	Fills in the factory values of the discipline after a confirmation (below). Nothing is saved until you click Save.
Cancel	Closes without saving. When you changed something, it asks *"Discard Changes?"* first.
Save	Checks and saves the values. An invalid value is reported in red at the bottom of the dialog and nothing is saved.

Confirmations of the Time Settings

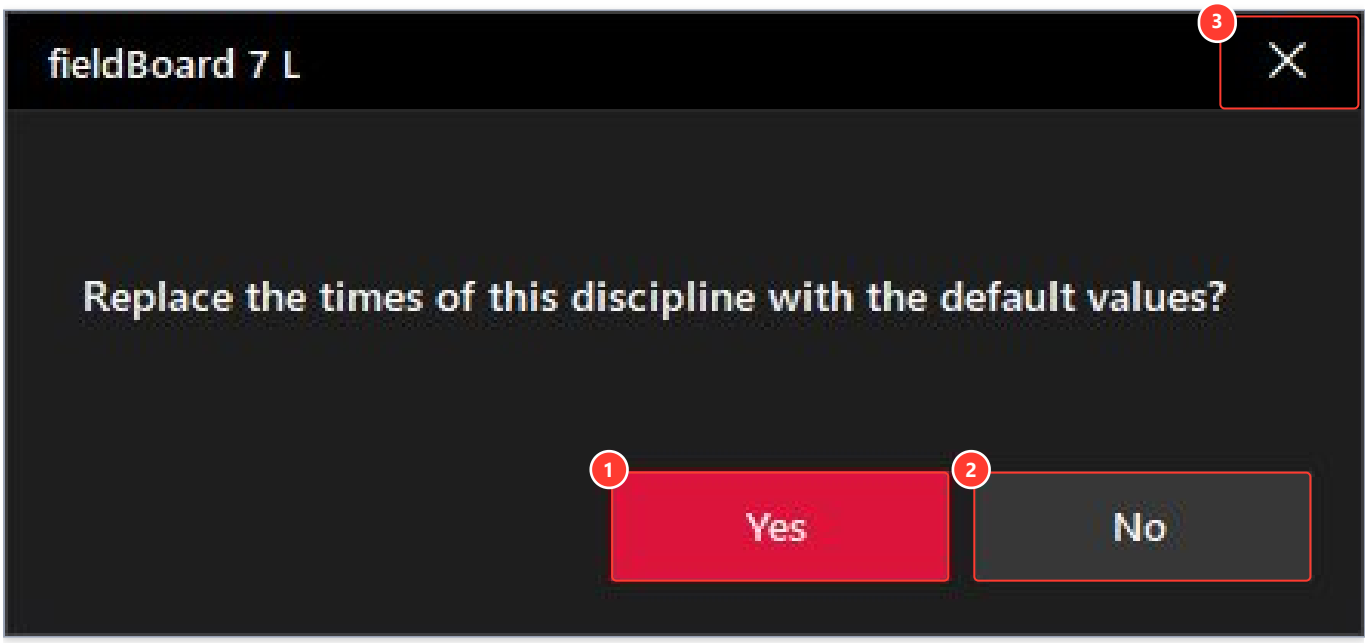


Figure 15. "Replace the times of this discipline with the default values?" (Default Values)

#	Control	What it does
1	Yes	Fills every row with the factory value of the discipline. Click **Save** afterwards to keep them.
2	No	Keeps the values in the dialog.
3	Close (×)	The same as **No**. `Esc` also answers No.



Figure 16. “Discard Changes?” (Cancel or × after a change)

#	Control	What it does
1	Yes	Closes the dialog and forgets the changes.
2	No	Returns to the dialog with your changes.
3	Close (×)	The same as **No**. `Esc` also answers No.

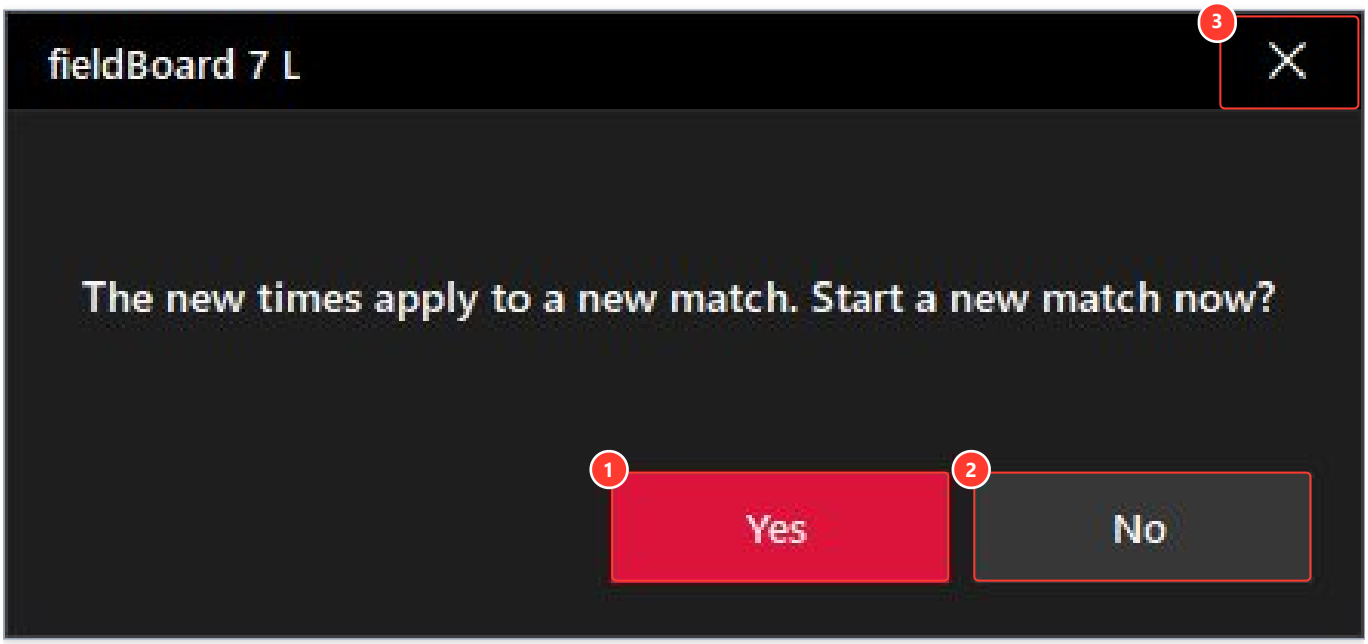


Figure 17. “The new times apply to a new match. Start a new match now?” (Save during a match)

#	Control	What it does
1	Yes	Starts a new match at once with the new times.
2	No	Keeps the running match with the old times; the new times are used from the next new match.
3	Close (×)	The same as **No**. `Esc` also answers No.

When the New Times Apply

Saved times are stored per discipline (only the values that differ from the factory values) and are used for every later match of that discipline. After **Save** a new match starts at once; if a match is in progress the program first asks whether to start one now (above).

> **Note** While a discipline uses own times, the Time Settings button shows an asterisk (**Time Settings ***) in amber. Use **Default Values** and **Save** to return to the official times.

Undo

Undo (the Undo button, `Ctrl`+`Z`, or `F12` in the default keyboard shortcuts) takes back the last scoring change: points, goals, fouls, timeouts, penalties, period changes and so on, up to 100 steps back. The running clocks keep their time. Undo also works from the remote control. Text changes and info graphics are not part of Undo.

There is one Undo button per sport: in the timed sports it is in the bottom bar; set sports, beach tennis, cricket and the swimming desk have it on their own panel and no Undo in the bottom bar. The dive desk has no Undo button: use **Correct** for a published dive, or `Ctrl`+`Z` / the remote Undo.

Restoring a Match after a Crash

If fieldBoard 7 L did not close normally (power cut, Windows update, crash), the next start finds the journal of the unfinished match and asks whether to restore it. The question names the sport and the time of the last entry.

Restore Question

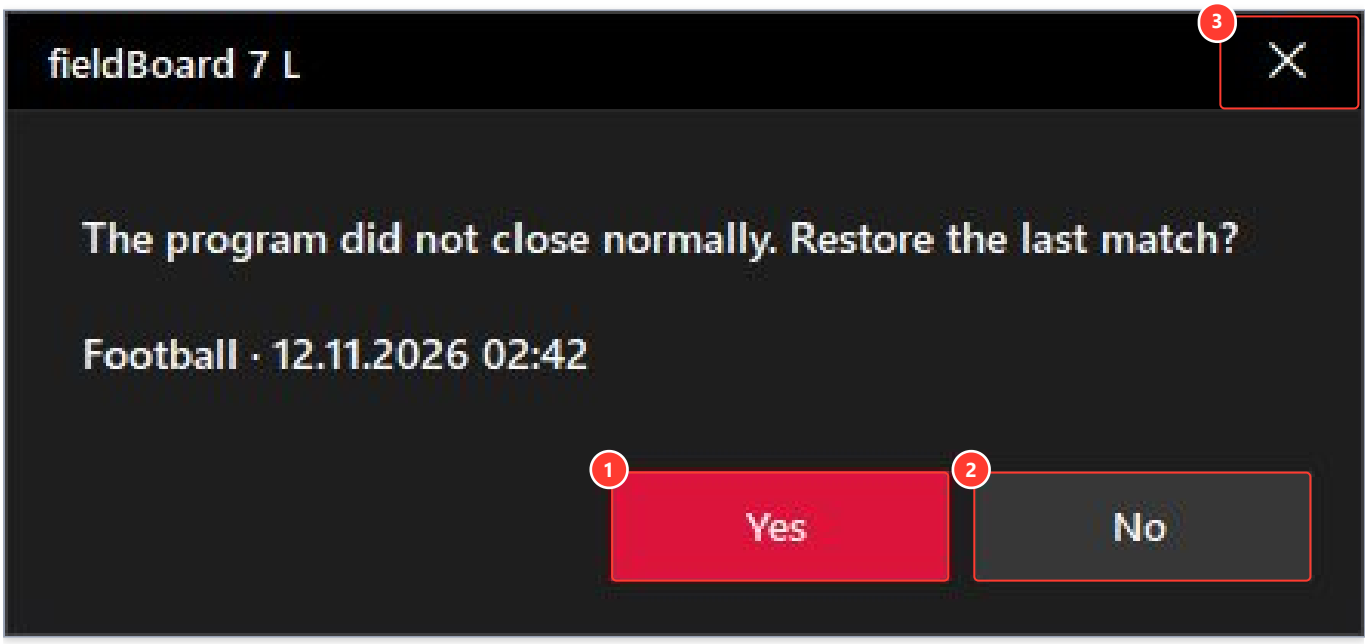


Figure 18. “The program did not close normally. Restore the last match?”

#	Control	What it does
1	Yes	Replays every command of the journal: scores, fouls, timeouts, penalties, periods and the team setup are back as they were. The clock is **stopped** and shows the time of the last recorded action.
2	No	Starts with a new match of the last sport. The journal file stays in *data\matches*.
3	Close (×)	The same as **No**. `Esc` also answers No.

1. Answer **Yes**.
2. Compare the clock with the official time and correct it with **Set Clock** if needed (the time that ran between the last action and the crash is not in the journal).
3. Check that the board is open (St – it opens again by itself at its place when it was on) and start the clock.

5 The Info Page

The Info page puts event graphics on air: announcements, goals, cards and time penalties, player intros, substitutions, team lists and officials. Each row has its team, its player fields and a **Show** button. Which rows you see depends on the sport and the design: basketball has no goal or card row, handball has its 2-minute penalties, set sports show sanctions (warning, penalty, expulsion, disqualification), sports that count red cards have a Red Card row, and swimming, diving and cricket keep only the announcement and the info screens.

The Rows of the Info Page

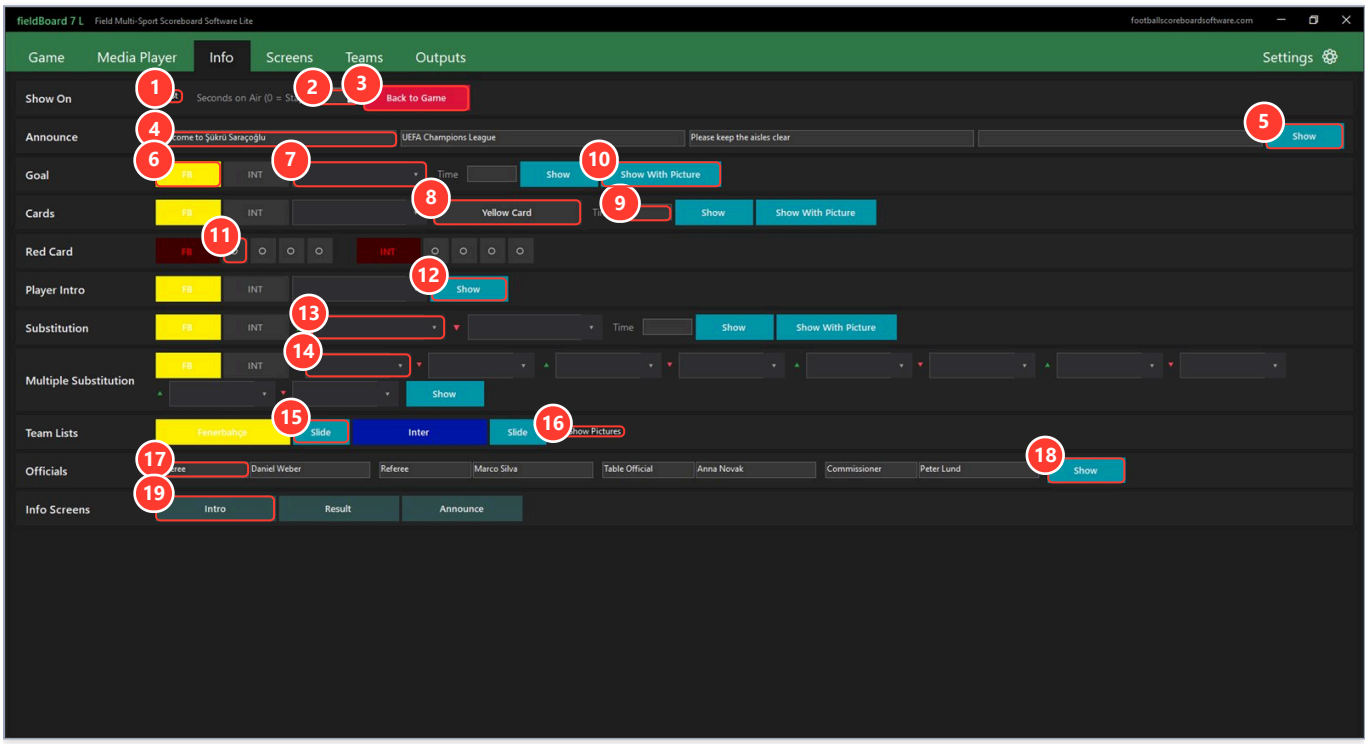


Figure 19. The Info page

#	Control	What it does
1	**Show On: St**	The graphics of this page go to the Standard board as full-screen info screens. Untick it to prepare a row without putting anything on air.
2	**Seconds on Air (0 = Stay)**	How long a graphic stays on air before the outputs return to the game screen (0–120 s, default 10). **0** = the graphic stays until you click Back to Game.
3	**Back to Game**	Takes the graphic off at once and returns the board to the game screen (it also stops a running team slide). A board that you switched to another screen in the meantime is left alone.
4	**Announce: Title, Line 1, Line 2, Line 3**	Free announcement texts (welcome, next match, safety notes …): a title and up to three lines. The same four texts are on the Screens page.
5	**Announce: Show**	Saves the texts and shows the **Announce** screen on the board.
6	**Team buttons**	Every player row starts with the two teams (short names). The chosen team is shown in its team colour; changing the team empties the player fields of the row.
7	**Player field**	Type a number and / or a name (e.g. *17 John Smith*) or click ▾ to pick from the team list (menu below). A typed player that is not in the team list is added to it (number and name).

#	Control	What it does
8	**Goal: score type**	Where the sport has several score types (goal or behind, try or conversion …), this list chooses the title of the goal graphic.
9	**Time**	The box after the **Time** label: minute or game time printed on the graphic. Empty = the game clock at the moment you click Show. The box empties after each Show.
10	**Show / Show With Picture**	**Show** puts the graphic on air with number and name; **Show With Picture** adds the player photos chosen in the **Photo** column of the Teams page (a player without a photo is shown without one).
11	**Red Card counts**	Four dots per team set the number of red cards of the team on the board (0–4). Click the last lit dot to take one back. This row changes the score data directly (it is the same as the red card count on the Game page).
12	**Player Intro: Show**	Shows one player (number, name, photo when there is one) on St.
13	**Substitution: In ▲ / Out ▼**	The player coming in (green ▲) and the player going out (red ▼). Show / Show With Picture put both on one graphic.
14	**Multiple Substitution**	Up to five in ▲ / out ▼ pairs of one team. Each pair (green ▲ in, red ▼ out) stays together as one block; when the row is too narrow, a whole pair moves to the next line. Pairs with an empty field are left out. **Show** puts all pairs on one graphic (St *Substitutions*).
15	**Team Lists: team / Slide**	The team button (team name in its colour) shows the whole team list of that team. **Slide** shows the players marked Show one after the other as player intros (every half of Seconds on Air, at least 3 s), then returns to the game screen.
16	**Show Pictures**	Team lists with the player photos (from the **Photo** column of the Teams page).
17	**Officials**	Four pairs of role and name (referee, umpire, table official, commissioner …). Rows with an empty name are left out.
18	**Officials: Show**	Saves the officials with the team setup and shows the officials graphic on the board.
19	**Info Screens**	The other info screens of the design: **Intro** (event and teams), **Result**, **Announce**, **Timeout** where the sport has one (cricket adds **Batting** and **Bowling**). They follow Show On and Seconds on Air like the rows above.

1. Keep **St** ticked under Show On and set **Seconds on Air**.
2. Choose the team in the row.
3. Type the player (number, name or both) or pick from the list with ▾; for a card choose the type, for a goal the score type if there is a list.
4. Optionally type the minute into the **Time** box; leave it empty to use the game clock.
5. Click **Show** (or **Show With Picture**). After the seconds on air the board returns to the game screen by itself; **Back to Game** ends it earlier.

> **Tip** You can work without team lists: a number alone is enough for the graphic. A number with a name is added to the team list of the Teams page, so it is there for the next graphic and the next match.

> **Note** A row appears only when the St design has a screen for it. Apart from the Red Card row, the Info page does not change the score: goals, fouls and cards for the board are entered on the Game page.

The Player List (▾)

Click ▾ in a player field: the list shows the players of the chosen team that are marked **Show** on the Teams page, with number and name.

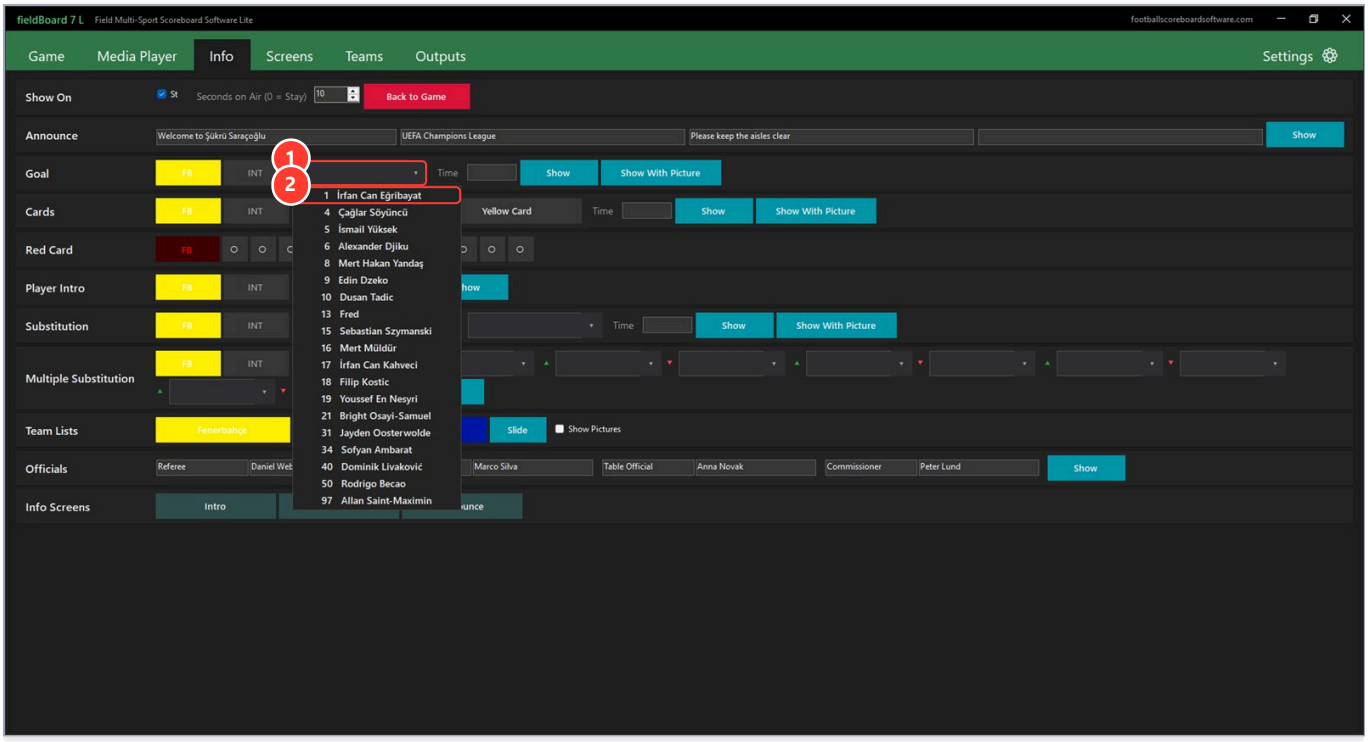


Figure 20. The player list of a player field (Football)

#	Control	What it does
1	**Player field**	The field whose list is open. You can also type here instead of picking.
2	**Players (number, name)**	Click a player to put number and name into the field. The list has one entry per player marked Show; it scrolls when the team is long.

Score Type, Card and Sanction Lists

The type list of a row decides the title of the graphic. Every sport has its own entries:

Football

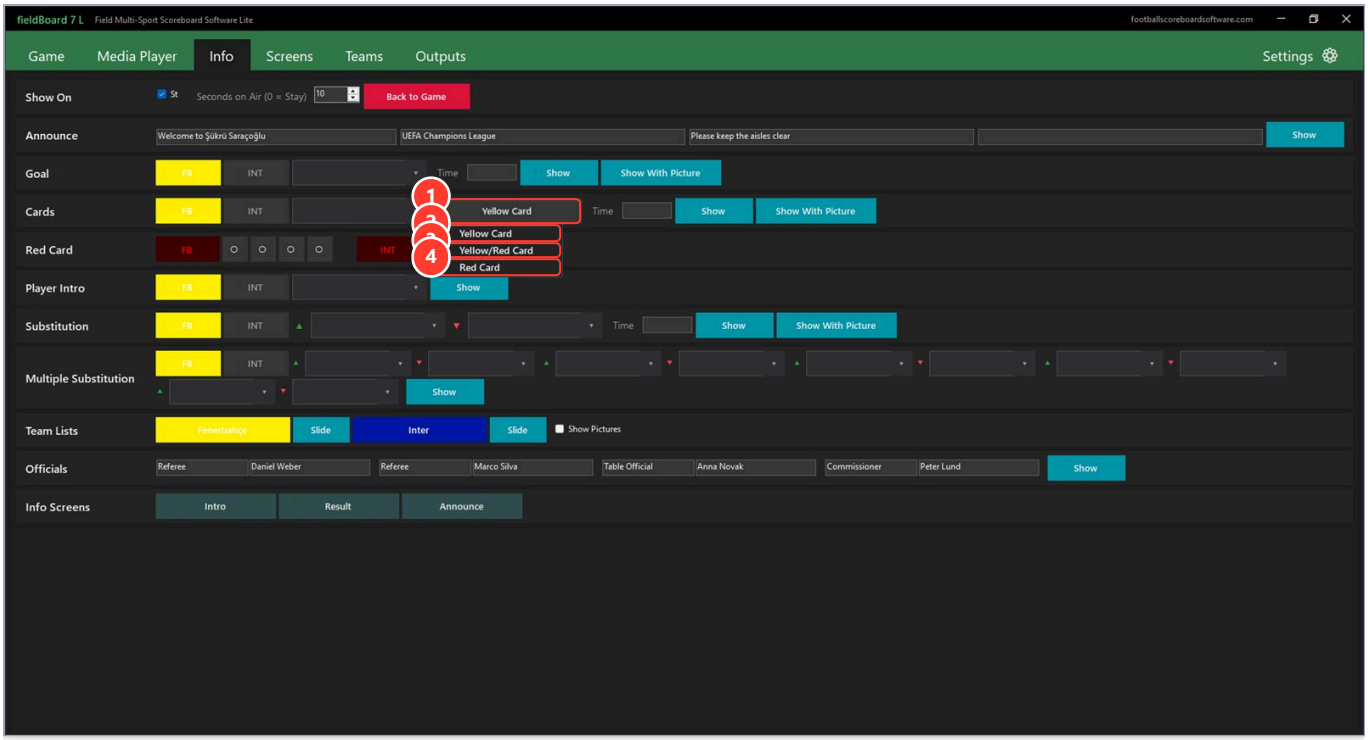


Figure 21. Football: the score types of the Goal row

#	Control	What it does
1	**Score type list**	Click to open the list; the chosen entry is the title of the graphic. Goals themselves are counted on the Game page.
2	**Yellow Card**	A yellow card (caution) for the player.
3	**Yellow/Red Card**	A second yellow card, shown as yellow and red.
4	**Red Card**	A red card (sending-off).

Rugby

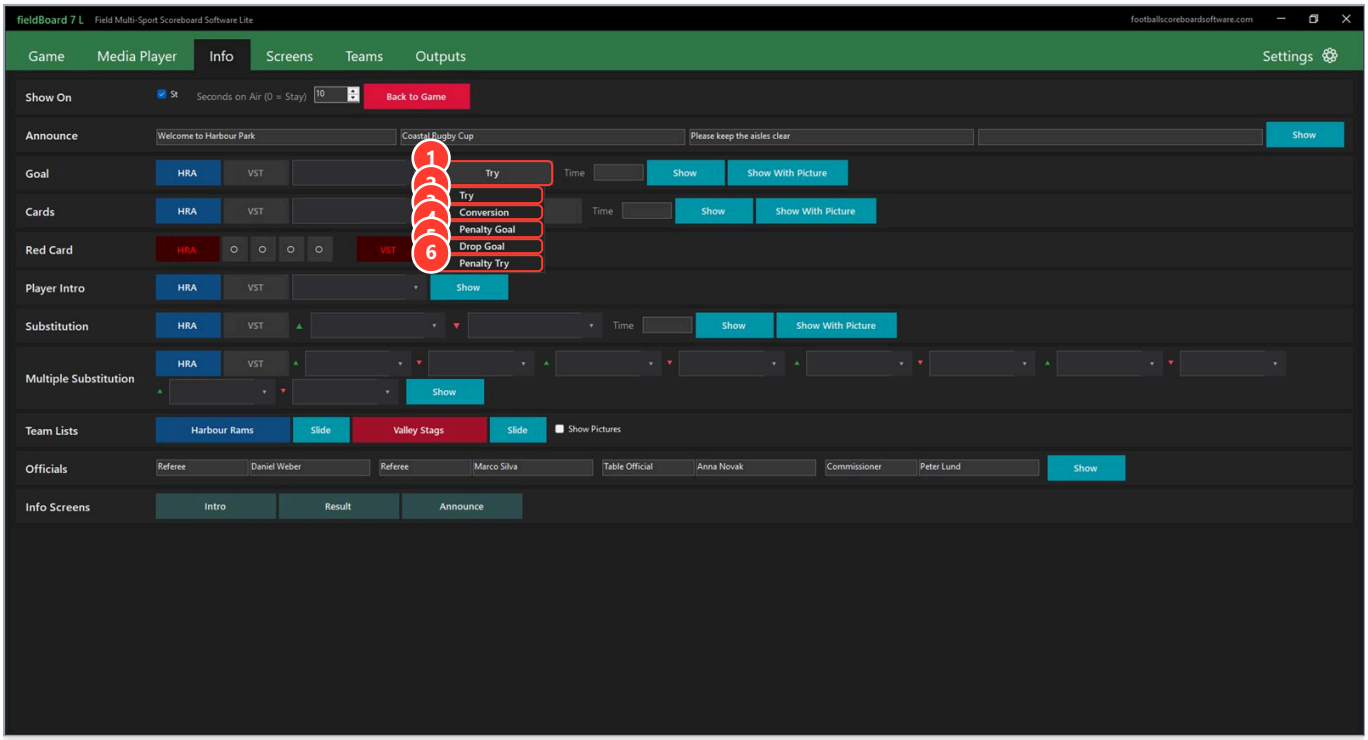


Figure 22. Rugby: the score types of the Goal row

#	Control	What it does
1	**Score type list**	Click to open the list; the chosen entry is the title of the graphic. Goals themselves are counted on the Game page.
2	**Try**	The scorer graphic titled “Try”.
3	**Conversion**	The scorer graphic titled “Conversion”.
4	**Penalty Goal**	The scorer graphic titled “Penalty Goal”.
5	**Drop Goal**	The scorer graphic titled “Drop Goal”.
6	**Penalty Try**	The scorer graphic titled “Penalty Try”.

American Football

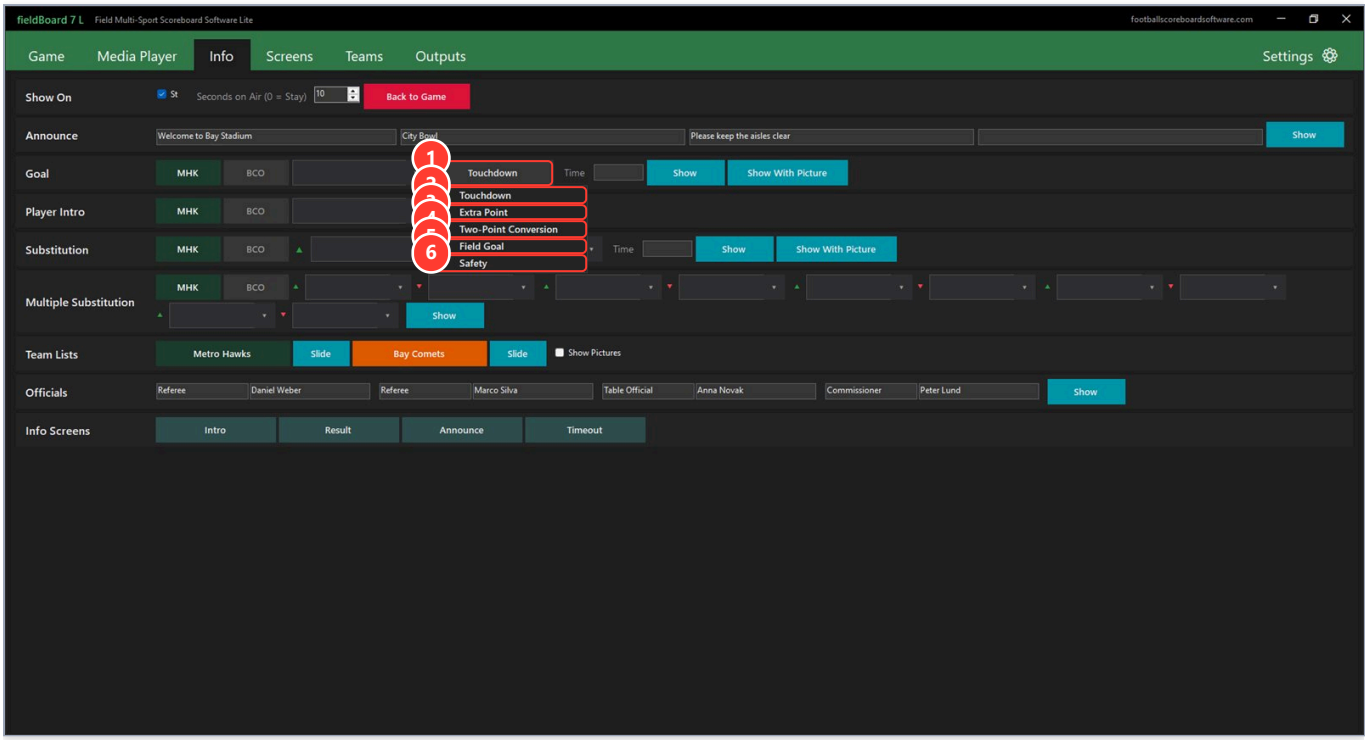


Figure 23. American Football: the score types of the Goal row

#	Control	What it does
1	**Score type list**	Click to open the list; the chosen entry is the title of the graphic. Goals themselves are counted on the Game page.
2	**Touchdown**	The scorer graphic titled “Touchdown”.
3	**Extra Point**	The scorer graphic titled “Extra Point”.
4	**Two-Point Conversion**	The scorer graphic titled “Two-Point Conversion”.
5	**Field Goal**	The scorer graphic titled “Field Goal”.
6	**Safety**	The scorer graphic titled “Safety”.

Gaelic Football

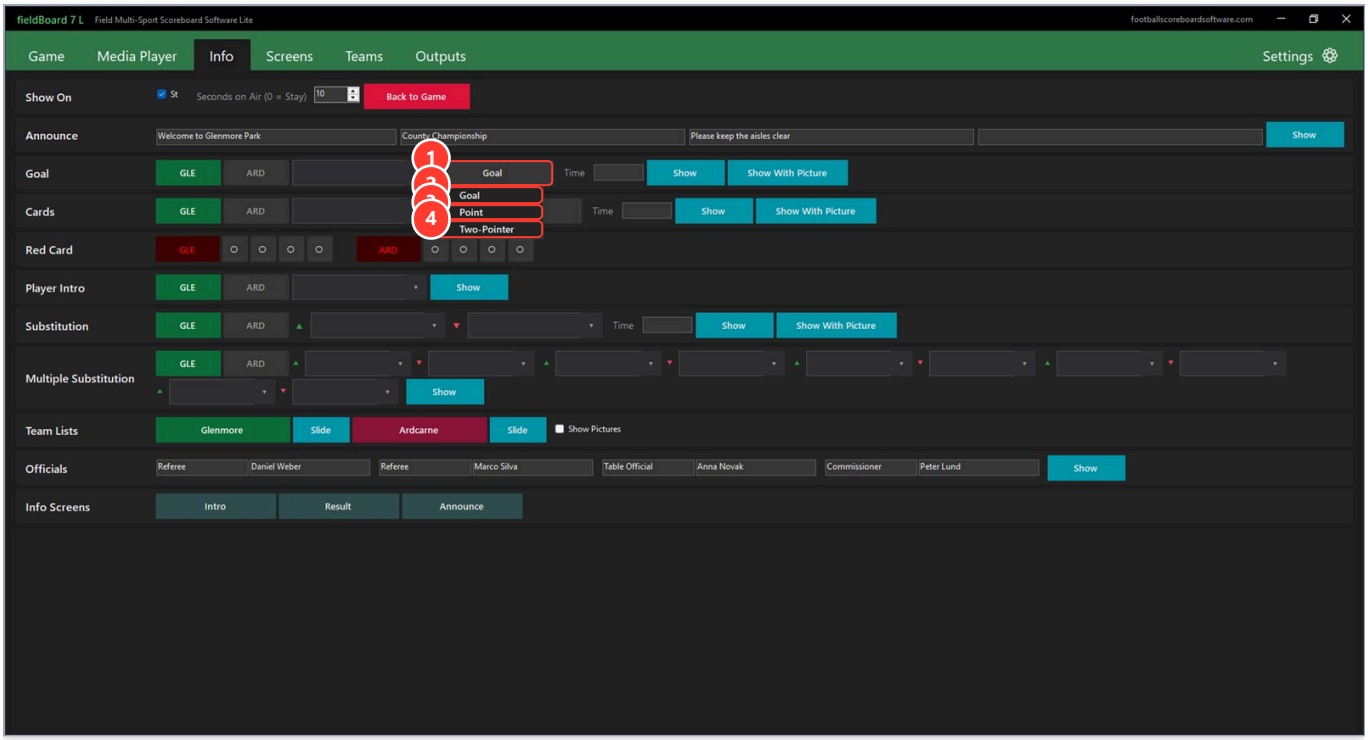


Figure 24. Gaelic Football: the score types of the Goal row

#	Control	What it does
1	**Score type list**	Click to open the list; the chosen entry is the title of the graphic. Goals themselves are counted on the Game page.
2	**Goal**	The scorer graphic titled “Goal”.
3	**Point**	The scorer graphic titled “Point”.
4	**Two-Pointer**	The scorer graphic titled “Two-Pointer”.

Hurling

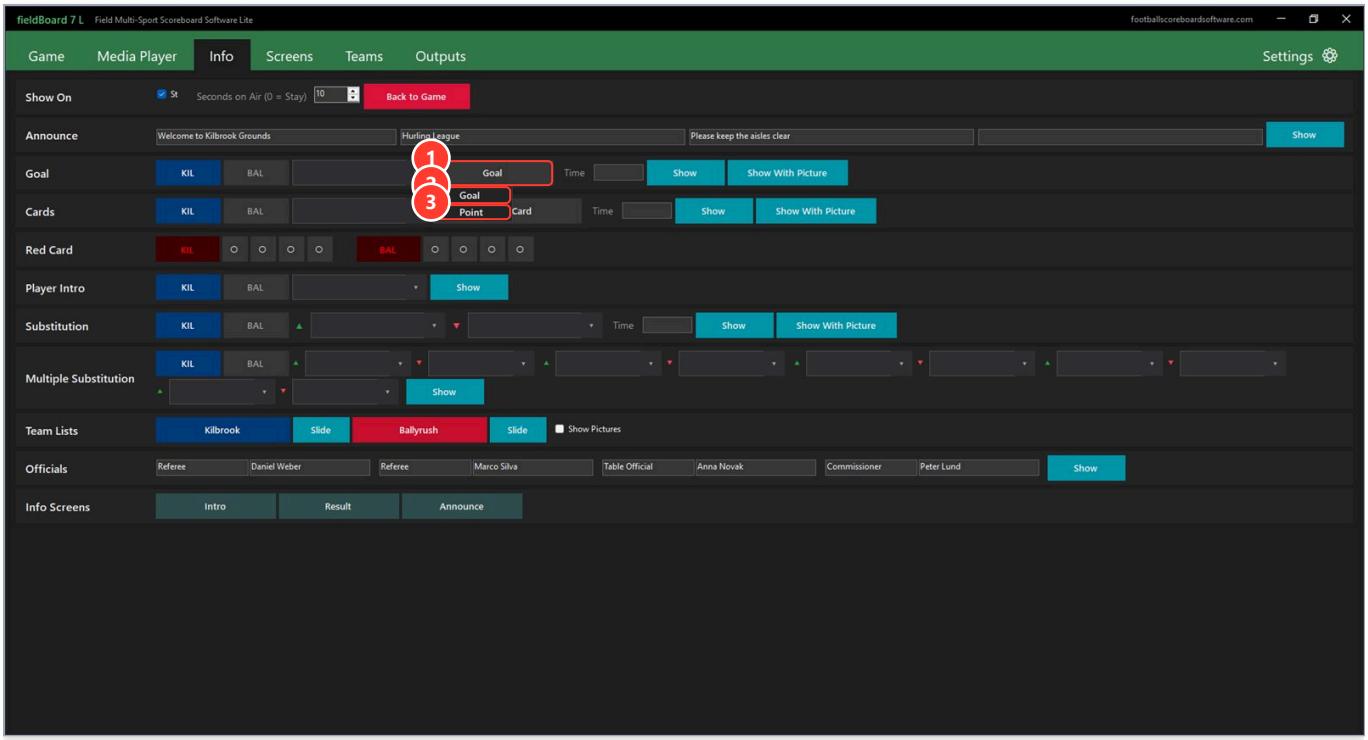


Figure 25. Hurling: the score types of the Goal row

#	Control	What it does
1	**Score type list**	Click to open the list; the chosen entry is the title of the graphic. Goals themselves are counted on the Game page.
2	**Goal**	The scorer graphic titled “Goal”.
3	**Point**	The scorer graphic titled “Point”.

Hockey

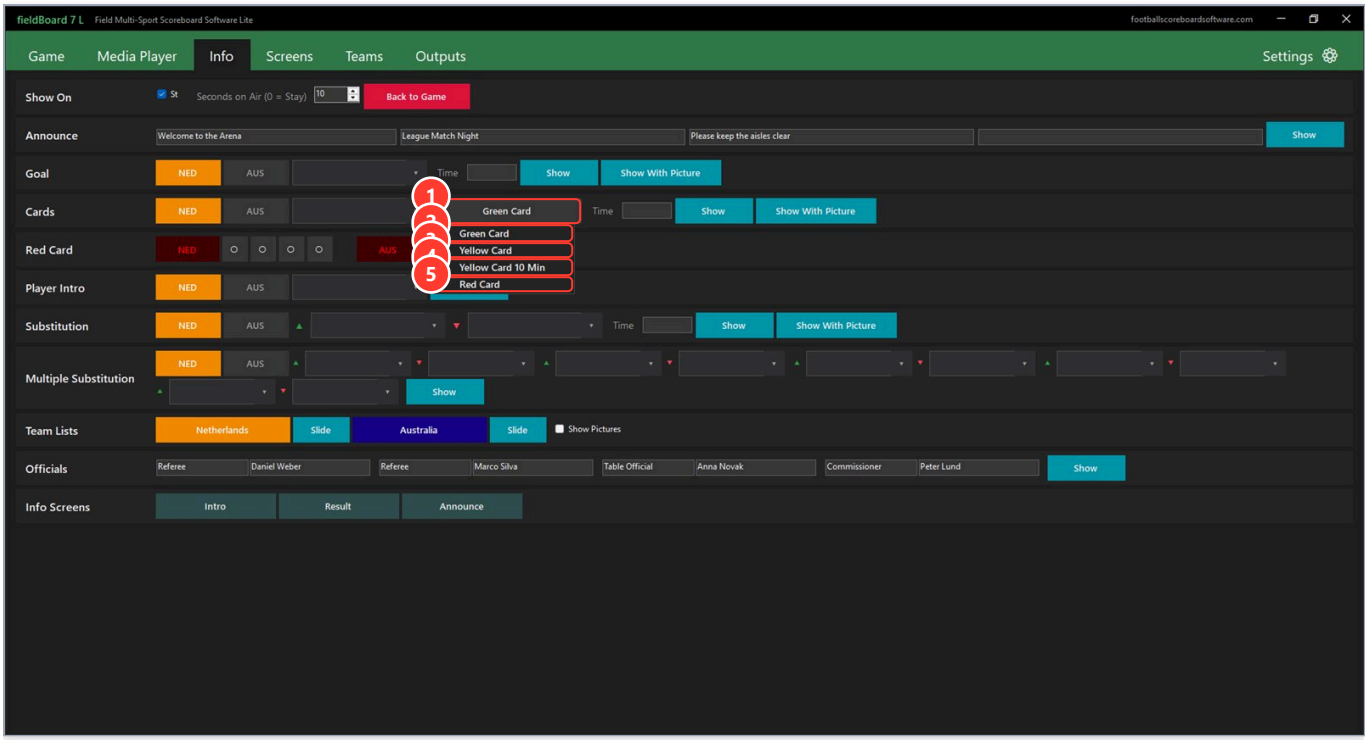


Figure 26. Hockey: the score types of the Goal row

#	Control	What it does
1	**Score type list**	Click to open the list; the chosen entry is the title of the graphic. Goals themselves are counted on the Game page.
2	**Green Card**	A green card (warning / short suspension, as the rules of the sport say).
3	**Yellow Card**	A yellow card (caution) for the player.
4	**Yellow Card 10 Min**	A yellow card with a 10-minute suspension.
5	**Red Card**	A red card (sending-off).

Lacrosse

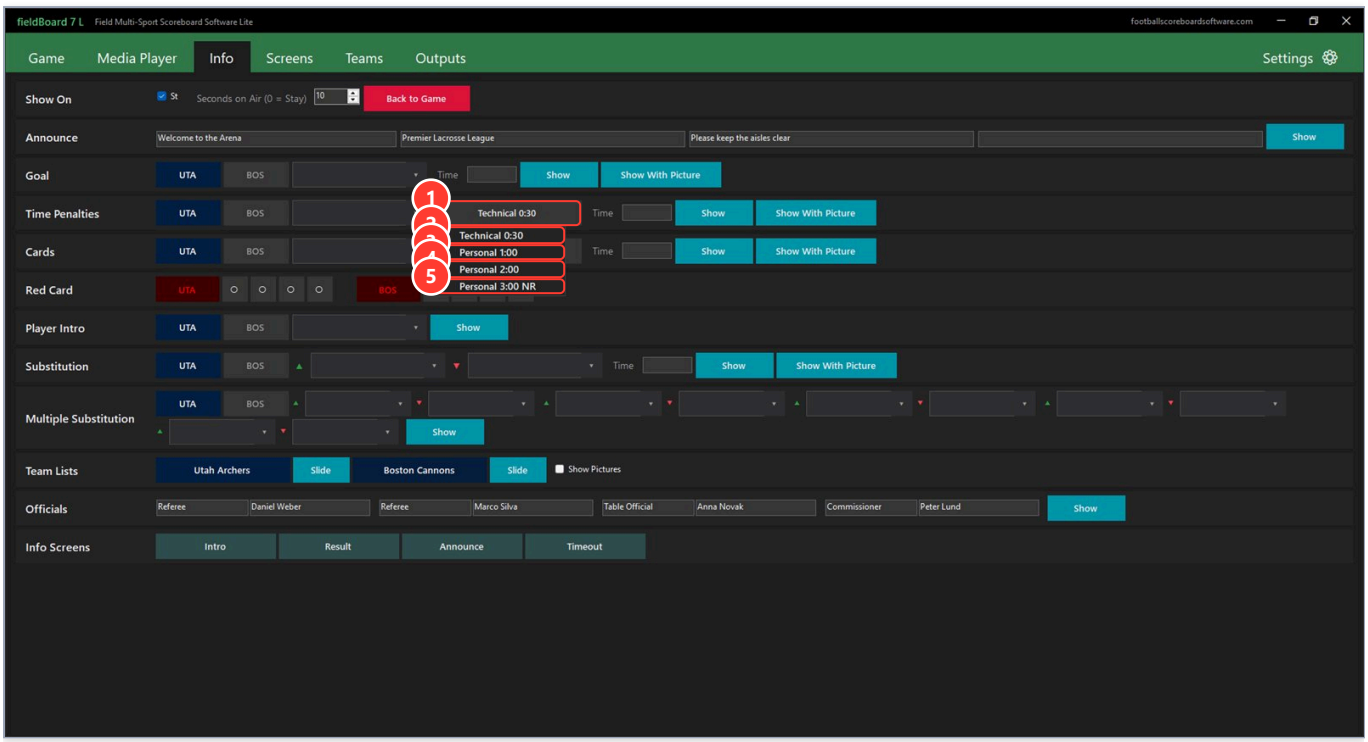


Figure 27. Lacrosse: the score types of the Goal row

#	Control	What it does
1	**Score type list**	Click to open the list; the chosen entry is the title of the graphic. Goals themselves are counted on the Game page.
2	**Technical 0:30**	A 30-second technical foul.
3	**Personal 1:00**	A one-minute personal foul.
4	**Personal 2:00**	A two-minute personal foul.
5	**Personal 3:00 NR**	A three-minute personal foul, non-releasable.

The Info Page of Each Sport

The rows follow the sport. The pages of all sports of fieldBoard 7 L:

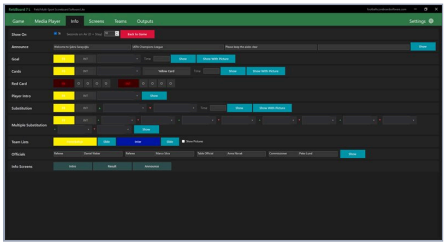


Figure 28. Football: Goal row with score types (Yellow Card …), Red Card row

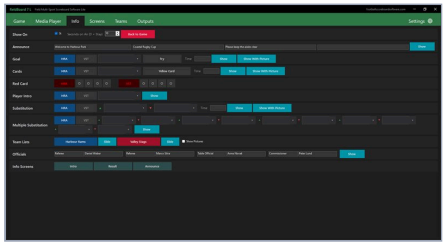


Figure 29. Rugby: Goal row with score types (Try …), Red Card row

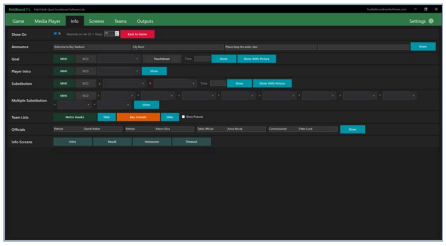


Figure 30. American Football: Goal row, Timeout screen

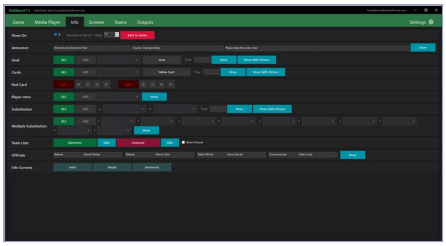


Figure 31. Gaelic Football: Goal row with score types (Goal ...), Red Card row

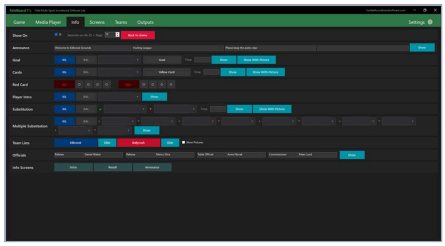


Figure 32. Hurling: Goal row with score types (Goal ...), Red Card row

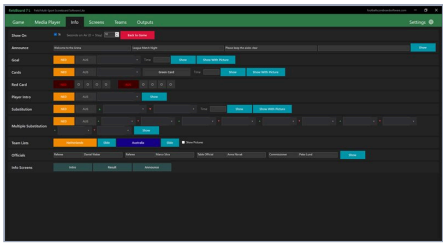


Figure 33. Hockey: Goal row with score types (Green Card ...), Red Card row

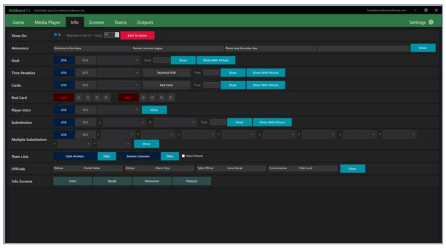


Figure 34. Lacrosse: Goal row with score types (Technical 0:30 ...), penalty / card row (Red Card ...), Red Card row, Timeout screen

Info Screens on the Standard Board

The full-screen graphics of the St output (Arena master design, with the background video). Each comes from the row of the same name or from the Info Screens row:

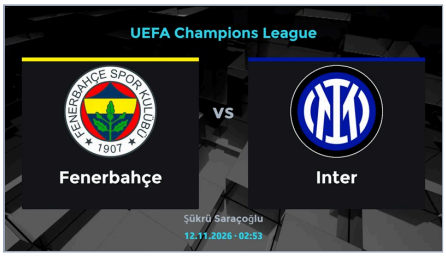


Figure 35. Intro – event name, both teams with logos, date and time

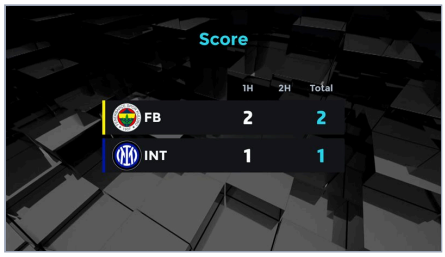


Figure 36. Result

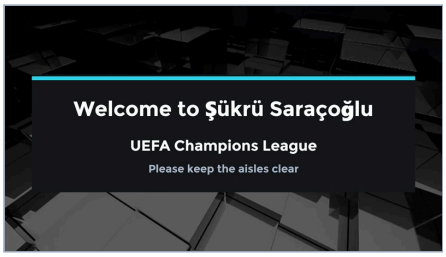


Figure 37. Announce – title and announcement lines



Figure 38. Goal – scorer with number, name, photo, team and score

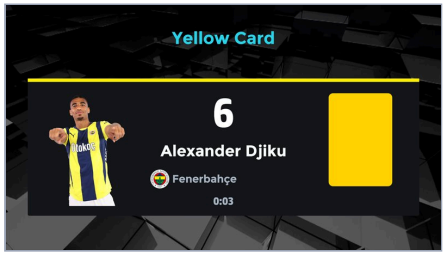


Figure 39. Card / penalty – player, team, type and game time

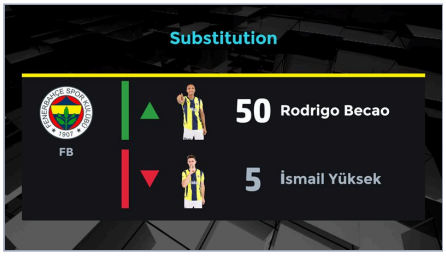


Figure 40. Substitution – player in (▲) and out (▼)

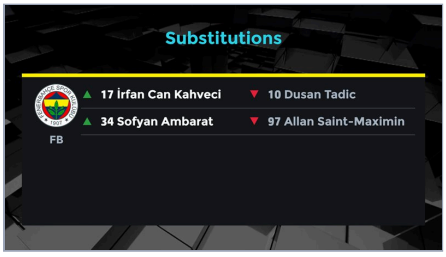


Figure 41. Multiple Substitution – several pairs of one team

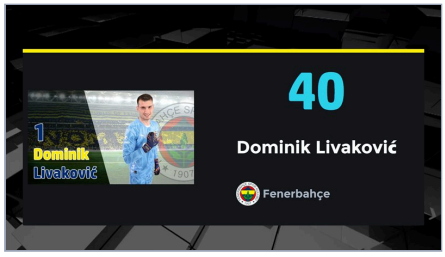


Figure 42. Player Intro



Figure 43. Team List

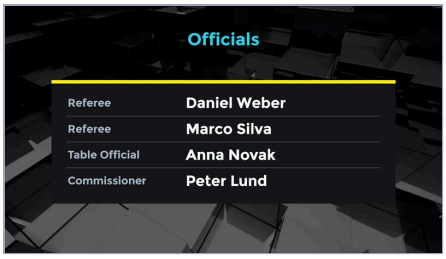


Figure 44. Officials

6 The Screens Page

The Screens page has two columns: the screens of the St board and the announcement texts. One click on a screen button puts that screen on air at once (without the Seconds on Air timer of the Info page). The screen on air is green.

Which screens appear depends on the design of the output and on the sport: the masters have the screens shown here; an own design may have more or fewer. A Goal or Card screen is never offered in a sport that has no goals or no cards / penalties, even when an older own design still contains it.

> **Tip** The on-air row of the Game page has the same St screens except the event screens, so you rarely need to leave the Game page during play.

Screen Buttons

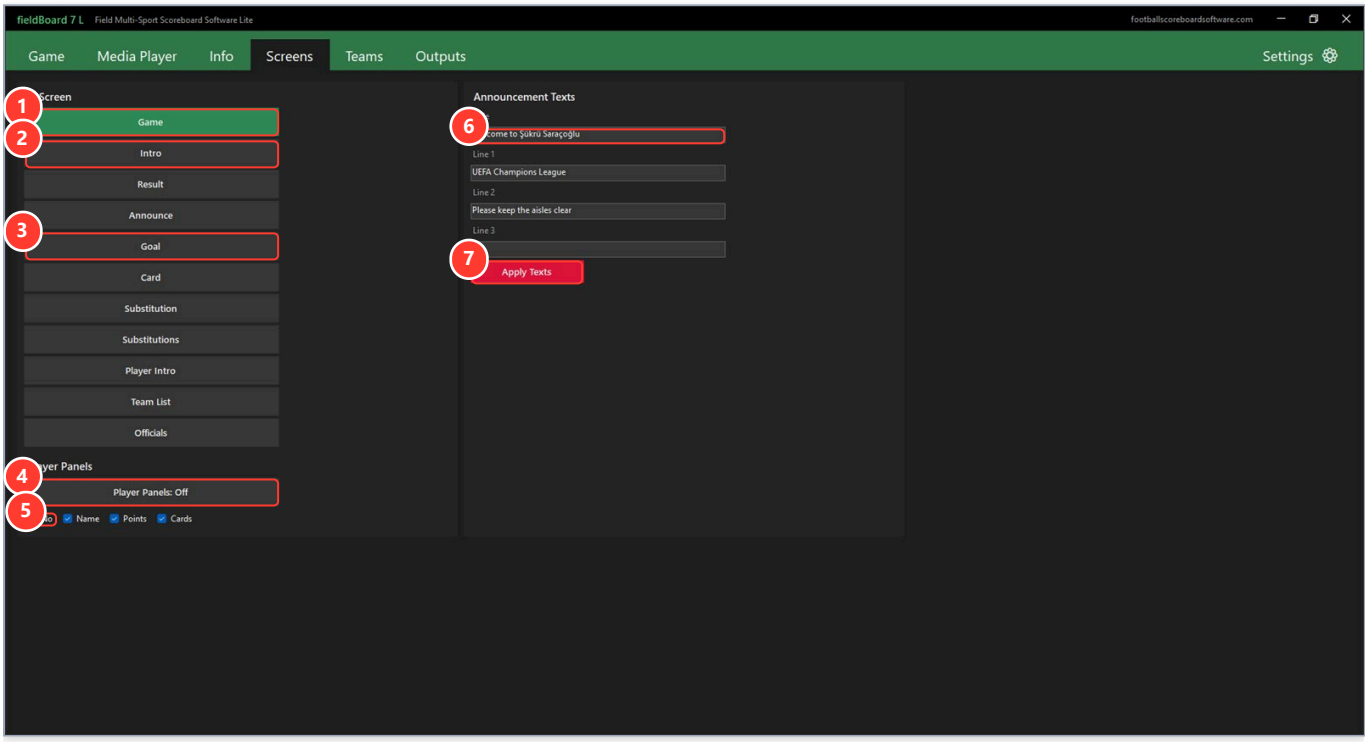


Figure 45. The Screens page

#	Control	What it does
1	St Screen: Game	The scoreboard of the Standard output. Click to return from any info screen.
2	St info screens	**Intro**, **Result**, **Announce** and, where the sport has one, **Timeout** (cricket: **Batting**, **Bowling**): shown with the data of the running match.
3	St event screens	**Goal**, **Card**, **Substitution**, **Substitutions**, **Player Intro**, **Team List**, **Officials**: they show the player or team last chosen on the Info page. Use the Info page to fill them. **Goal** is offered only in sports that score goals (for example not in basketball) and **Card** only in sports with cards, time penalties or sanctions (for example not in basketball, Aussie Rules or American football).
4	Player Panels: On / Off	Switches the St game screen between the plain scoreboard and the scoreboard with player panels (the same as the Player Panels button on the Game page). Green while On.

#	Control	What it does
5	**Player panel columns**	Which columns the player panels show: **No**, **Name** and the statistics of the sport (**Fouls**, **Points**, **Penalties**, **Cards**). Saved per sport.
6	**Announcement Texts**	**Title** and **Line 1** – **Line 3** of the announcement screens: St Announce shows the title and all three lines. The same texts as in the Announce row of the Info page.
7	**Apply Texts**	Puts the title and the three lines on the board.

The Screens Page of Each Sport

The screen lists of the master designs of every sport (player panel options only where the sport keeps player statistics):

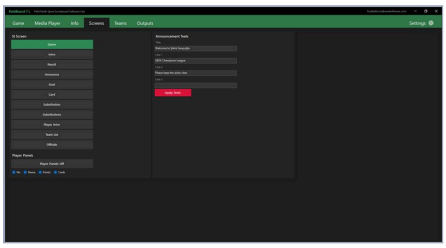


Figure 46. Football

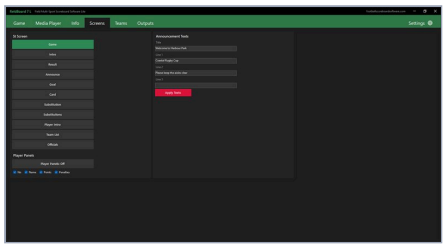


Figure 47. Rugby

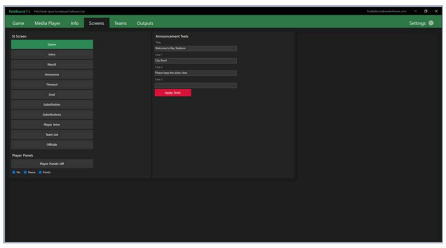


Figure 48. American Football

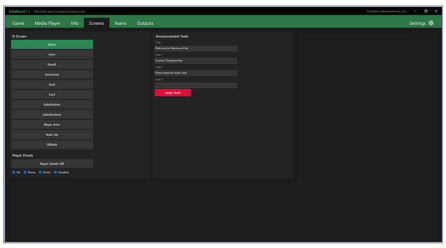


Figure 49. Gaelic Football

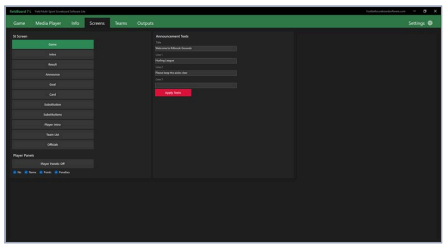


Figure 50. Hurling

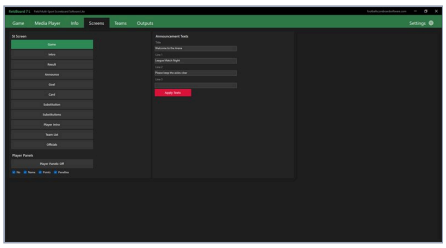


Figure 51. Hockey

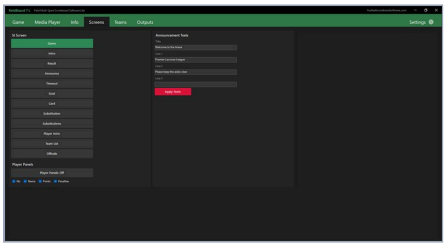


Figure 52. Lacrosse

7 Teams and Players

The Teams page holds the event, the two teams and their team lists. The setup is saved per sport (*data\config\<sport>\setup.json*) and stays when you start a new match; switching to another sport loads that sport's own setup.

Event and Teams



Figure 53. The Teams page

#	Control	What it does
1	**Event Name**	The competition or event (league, cup, tournament). Shown on the Intro screen.
2	**Event Subtitle**	A second line for the event (round, group, final ...).
3	**Venue**	The hall, ground or pool.
4	**Name (Home Team)**	The full team name for the boards.
5	**Short Name**	Short name or abbreviation (3–4 letters) for compact boards and the team buttons of the Info page.
6	**Colour**	Click to choose the team colour. It is used for the team stripes, the team buttons and the graphics.
7	**Choose Logo...**	Choose a logo file (PNG, JPG, WEBP or SVG). The file is copied into *data\logos*; the file name is shown next to the button.
8	**Players**	The team list: **No** (up to 4 characters, e.g. 7, 07, 23A), **Name**, **Show** and **Photo** (next callout). Type into the empty last row to add a player. To remove a player, empty both the number and the name of the row (empty rows are dropped when you click Apply). Players with Show ticked appear as number buttons on the Game page, in the player panels, the player lists of the Info page, the team list graphics and the team slide.

#	Control	What it does
9	**Photo**	The player photo. A row without a photo shows **…**; **click** the cell to choose a picture (PNG, JPG, JPEG or WEBP). The file is copied into *data\media\players* and its name appears in the cell. **Right-click** the cell to remove the photo from the player (the copied file stays in the folder). Type the number and name of a new player first: the empty last row takes no photo. Like every change on this page, the photo is saved with **Apply**.
10	**Guest Team**	Name, Short Name, Colour, logo and Players of the guest team – the same fields as for the home team.
11	**Apply**	Saves everything on this page and updates the boards. **Changes are not saved until you click Apply.**

1. Type the event, venue and both teams.
2. Choose colours and logos.
3. Fill the team lists (or paste them row by row) and tick **Show** for the players of today.
4. Optionally click the **Photo** cell of a player to give the player a picture.
5. Click **Apply**.

Teams in the Different Kinds of Sport

Kind of sport	What “team” means on this page
Team sports with a clock (basketball, handball, football, hockey, water polo, beach soccer, Australian rules …)	Two teams with full team lists; numbers are used for fouls, penalties, cards and player panels on the Game page.
Set sports (volleyball, beach volleyball, footvolley, snow volleyball) and beach tennis	Two teams or pairs. For beach sports the name is usually the pair (e.g. *Surname / Surname*) and the team list holds the two or three players; sanctions on the Info page pick from it.
Cricket	Two teams with their players; the team list is used for the batter and bowler choices of the cricket panel and the batting and bowling cards.
Swimming and diving	No teams: the page holds the meet / event name, subtitle and venue and saves the competition (below). Swimmers, divers, heats and dive lists belong to the competition of the desk.

The Teams Page of Each Sport

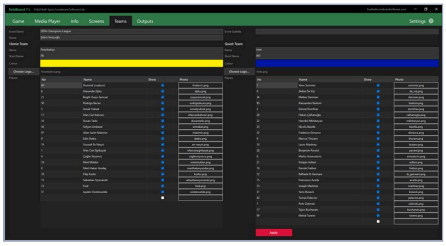


Figure 54. Football

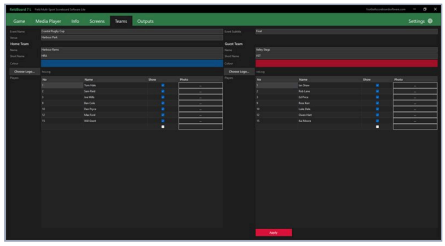


Figure 55. Rugby

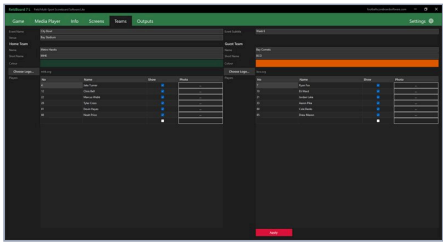


Figure 56. American Football

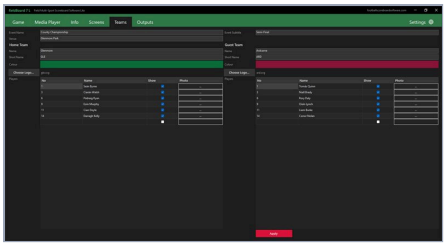


Figure 57. Gaelic Football

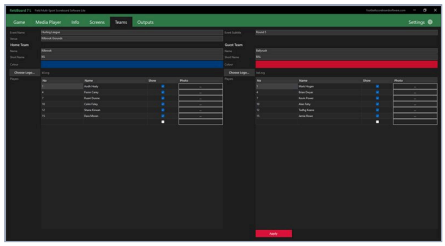


Figure 58. Hurling

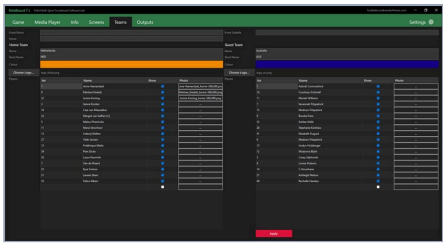


Figure 59. Hockey

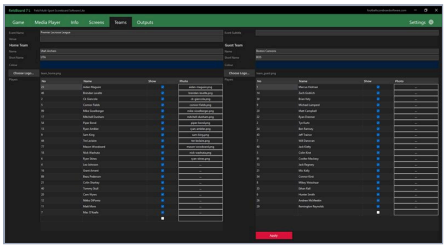


Figure 60. Lacrosse

Player Photos and Numbers

Numbers may contain up to four characters (e.g. 7, 07, 23A). A player typed on the Info page that is not in the list is added to it automatically.

Player photos are set in the **Photo** column of the team list:

1. Make sure the player has a number and a name in the list.
2. Click the player's **Photo** cell (it shows **...** while there is no photo).
3. Choose a picture file (PNG, JPG, JPEG or WEBP) in the file dialog. fieldBoard 7 L copies it into *data\media\players* under a new name made of the sport, the team, the number and a time stamp, so the original file can be moved or deleted afterwards. The cell shows the file name.
4. Click **Apply** to save the team list with the photo.

To take a photo away, **right-click** the Photo cell: it shows **...** again (click Apply to save).

The photos are used by **Show With Picture** in the Goal, Card and Substitution rows of the Info page, by the team lists when **Show Pictures** is ticked, and by the player intro. A player without a photo is shown with number and name only.

> **Tip** Untick **Show** for players who are not playing today instead of deleting them: they disappear from the number buttons, panels, player lists and team lists but stay in the list for the next match.

8 Outputs

The Outputs page sets up the board window. Each output has one row with its settings and a second row with the window position. Every change is saved at once and applied to the open window; at the next start the program opens the board windows again exactly as they were. How to bring the board onto an LED screen, a video processor or a sender card is explained step by step in the next chapter, *Sending the Board to the LED Screen*.

The Output Rows

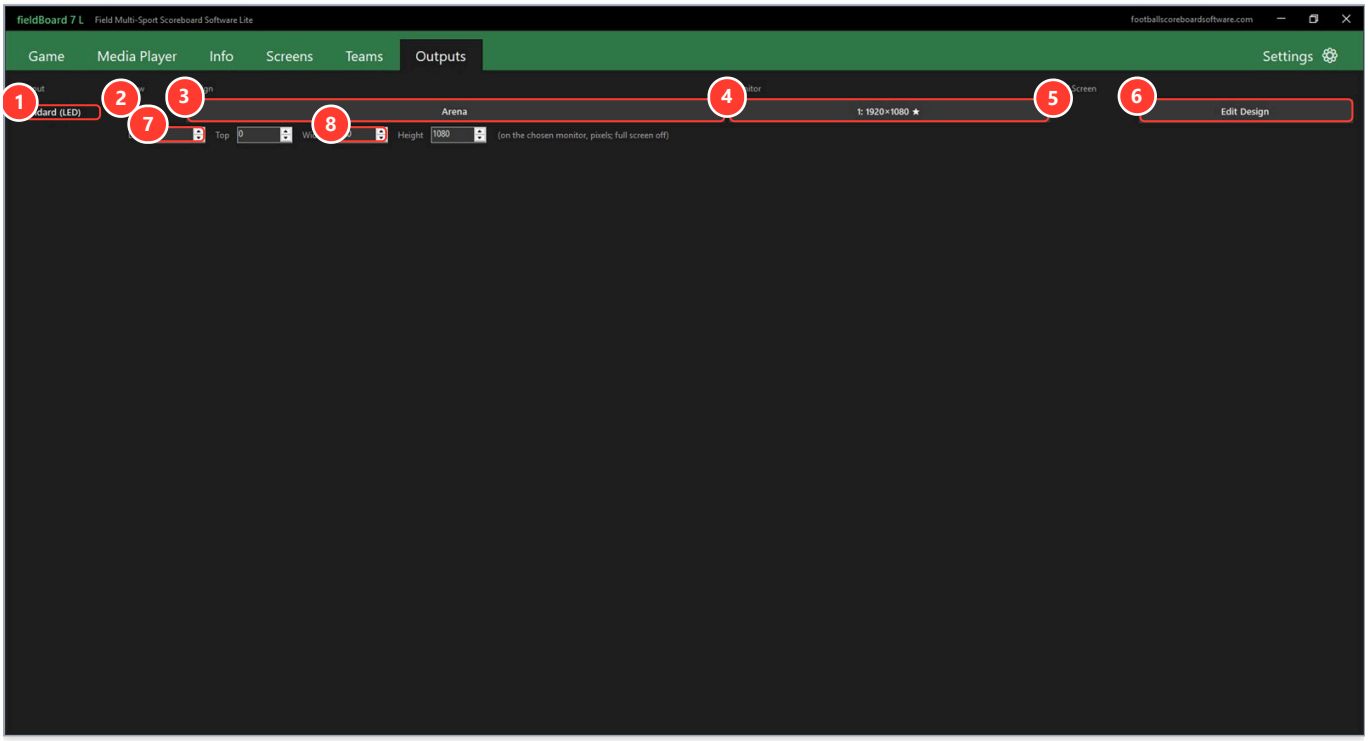


Figure 61. The Outputs page

#	Control	What it does
1	Output	**Standard (LED)** = St, the board output of fieldBoard 7 L.
2	Show	Opens or closes the output window – the same as the St button on the Game page. An output that is on opens again by itself at the next start of the program.
3	Design	The design of this output for the running sport (menu below). Own designs are marked with ★. Each sport remembers its own choice.
4	Monitor	The monitor of the window: number, resolution, ★ = the main monitor (menu in the next chapter). With two or more monitors a new output opens on monitor 2.
5	Full Screen	Ticked: the board fills the chosen monitor. Not ticked: the window uses Left / Top / Width / Height.
6	Edit Design	Opens the design editor with the design and the current screen of this output.
7	Left / Top	Position of the window on the chosen monitor in pixels (0 / 0 = top left corner of that monitor). Only when Full Screen is off. See *Sending the Board to the LED Screen*.
8	Width / Height	Window size in pixels (at least 160 × 90), for LED walls and strips with an unusual resolution (e.g. 1920 × 480 or 1280 × 1024). The board scales to the window.

Choosing a Design

Click the design field of a row to open the list of designs of the running sport:

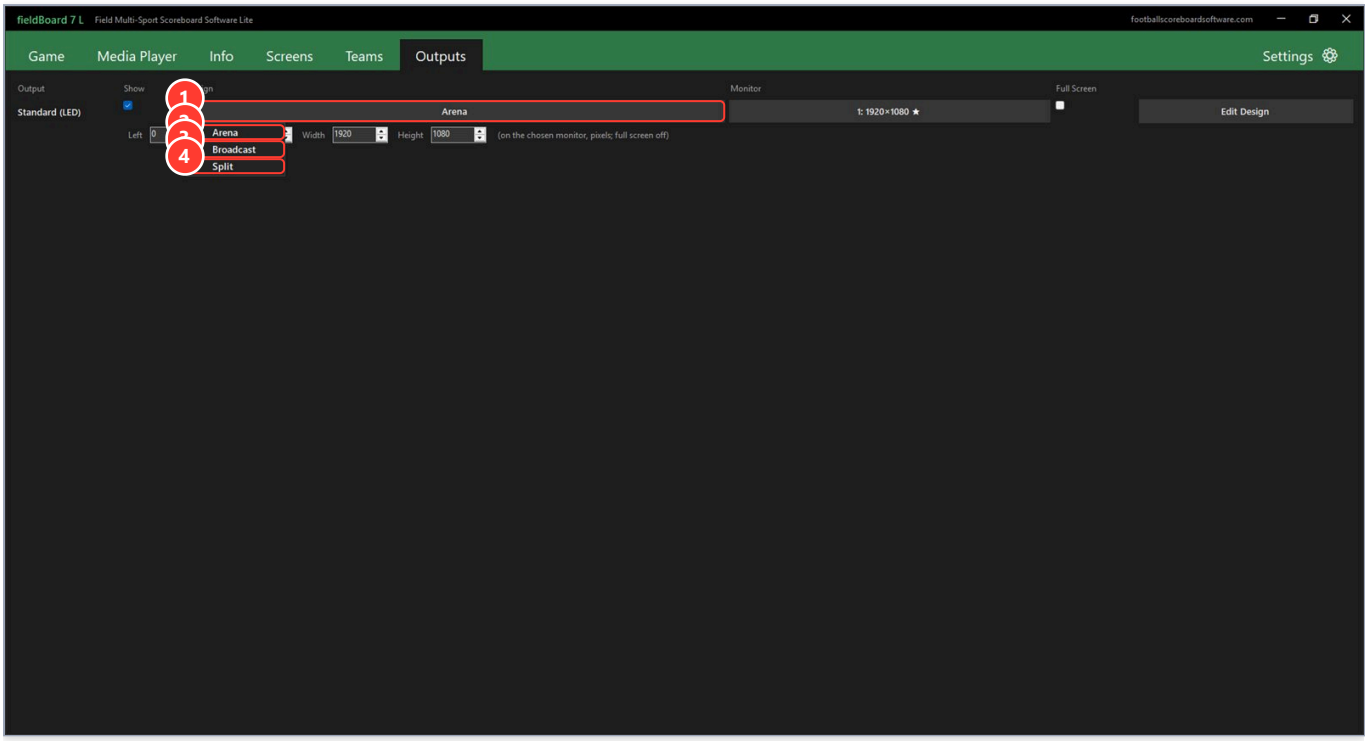


Figure 62. The design list of the Standard (LED) output

#	Control	What it does
1	**Design field**	Shows the design in use; click to open the list.
2	**Arena**	Master design: black LED look with big digits and corner logos. The default of St.
3	**Broadcast**	Master design: header strip and team rows.
4	**Split**	Master design: team panels in the team colours left and right of a centre column.

Own designs (saved copies, see *Board Designs*) follow the masters in the list, marked with ★. The board changes at once; the choice is kept per sport and output.

Background Video and Picture

The two icons at the bottom right of the Game page put a video or a picture behind the board. The first video (MP4, WEBM, MOV) and the first picture (PNG, JPG, WEBP) in *data\media\background*, in alphabetical order, are used. When the folder is empty, clicking the icon asks for a file and copies it there.

Use a dark, calm video so the digits stay readable. Most pictures in this guide were taken with a dark animated background video; the board on the right shows the same design without it:

With and Without Background

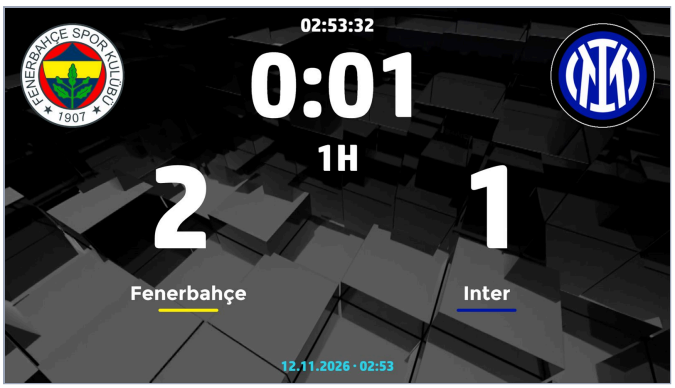


Figure 63. St board with the background video

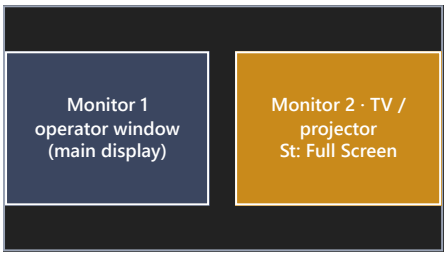


Figure 64. The same board without background (the design's own black)

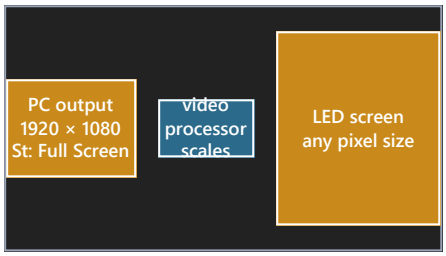
9 Sending the Board to the LED Screen

This chapter answers the question customers ask most: **how does the board get onto the LED screen?** Whether the LED is driven by a second monitor output, a video processor (scaler) or an LED sender card, the method is always the same: Windows sees the device as one more monitor, and the Outputs page of fieldBoard 7 L puts the board window on that monitor – either filling it (**Full Screen**) or on an exact pixel area (**Left / Top / Width / Height**).

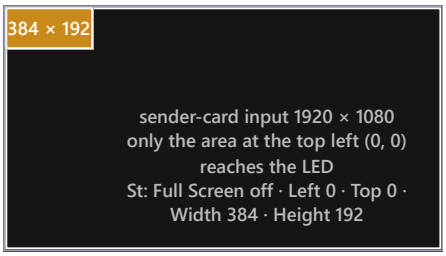
> **Note** **This is a one-time setting.** Everything on the Outputs page is saved at once. At every later start fieldBoard 7 L opens the board again by itself on the same monitor at the same place. You do not have to repeat it before each match – only when the LED, the processor, the sender card or the monitor arrangement changes.



Second monitor, projector or TV: the board fills monitor 2



Video processor: the full signal goes in, the processor scales it to the LED



Sender card: the board sits exactly on the pixel area the card sends to the LED

How Windows Sees the Outputs

The program never talks to the LED hardware directly. Whatever is connected to a video output of the PC – a monitor, a TV, a projector, an LED video processor or an LED sender card – appears in Windows as a monitor. The operator window stays on the main monitor; the board window goes to the LED monitor.

1. Connect the device to a free video output of the graphics card (HDMI, DVI or DisplayPort; an adapter cable is fine).
2. Press `Win` + `P` and choose **Extend**. (*Duplicate* would show the operator window on the LED; *Second screen only* would switch the operator monitor off.)
3. Open the Windows display settings (right-click the desktop → **Display settings**). The monitors are shown as numbered boxes; **Identify** shows the numbers on the screens. Drag the boxes so that their arrangement matches the desk – it only decides where the mouse crosses from one monitor to the other.
4. Click the LED monitor's box and set **Display resolution** to the resolution the processor or sender card expects (for most devices 1920 × 1080) and **Scale** to **100 %**.
5. Keep the operator monitor as the main display (*Make this my main display*), so that new windows and the taskbar stay on the desk.

> **Note** Scale 100 % on the LED monitor matters: fieldBoard 7 L places the board in the pixels Windows reports for that monitor. At 100 % these are the real pixels of the signal. At 125 % or 150 % Windows reports a smaller monitor (for example 1536 × 864 instead of 1920 × 1080) and enlarges the picture, so the board becomes soft and the Left / Top / Width / Height values no longer match the LED's pixel map.

On the Outputs page the **Monitor** list shows every monitor with its number and resolution; ★ marks the main display. The numbers follow the order in which Windows lists the monitors, which is not always the number shown by *Identify* – pick the LED monitor by its resolution when in doubt.

The Monitor List

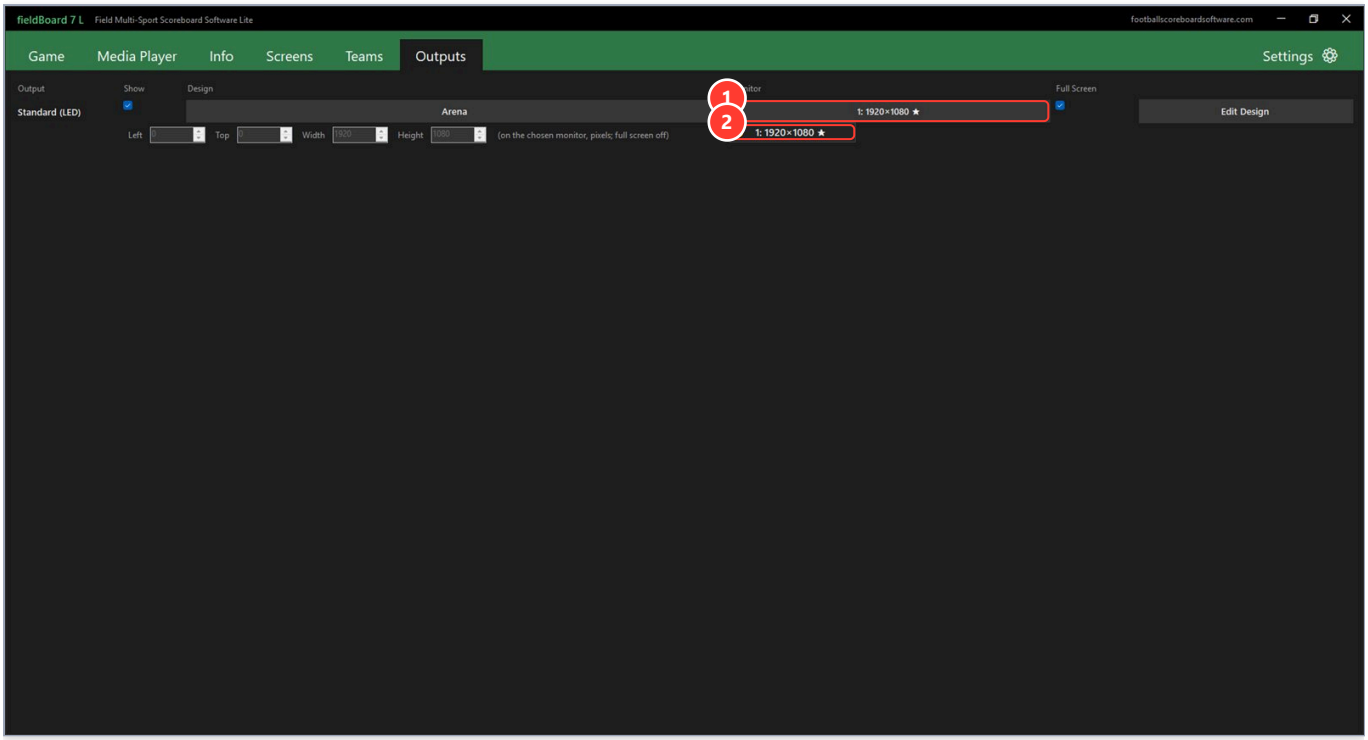


Figure 65. The Monitor list of the Standard (LED) row (this PC has one monitor; with more monitors each one is listed)

#	Control	What it does
1	**Monitor field**	Shows the chosen monitor; click to open the list.
2	**Monitor entries**	*number: width* × *height*, ★ = the main display. Click an entry: the board moves there at once and the choice is saved.

Second Monitor, Projector or TV

A monitor, TV or projector shows the whole picture of its input, so the board simply fills it:

1. Open the **Outputs** page.
2. In the **Standard (LED)** row choose the second monitor in **Monitor** (for example *2: 1920×1080*).
3. Tick **Full Screen**.
4. Tick **Show** (or click **St** on the Game page). The board fills the second monitor at once.

Full Screen on the Second Monitor

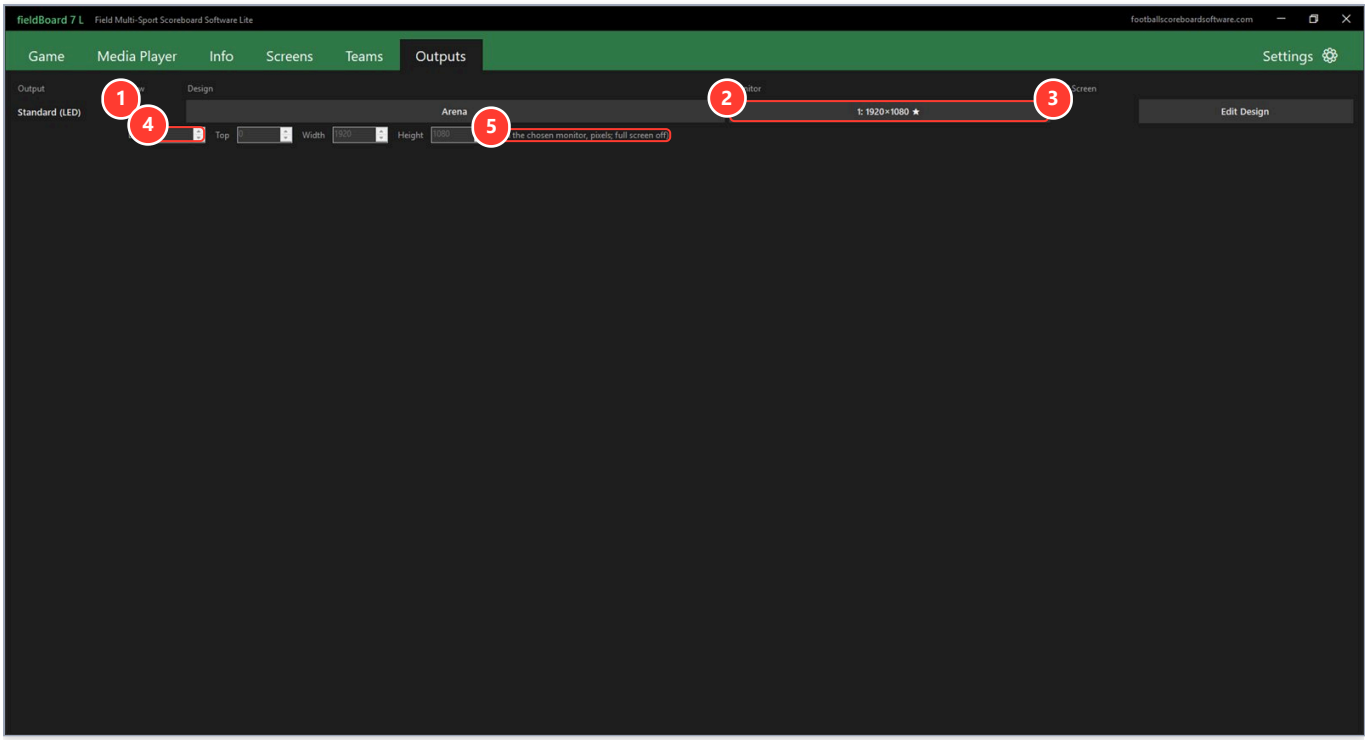


Figure 66. Standard (LED) on the whole monitor (Full Screen ticked)

#	Control	What it does
1	**Show**	Opens the St board window at once. It stays on, and the program opens it again by itself at every start.
2	**Monitor**	The display the board goes to: number, resolution, ★ = the main display of Windows. Choose the display that is the TV, the video processor or the sender card.
3	**Full Screen**	**Ticked**: the board fills the whole chosen monitor, whatever its resolution. The four position fields below are greyed out.
4	**Left**	Left, Top, Width, Height: used only when Full Screen is off.
5	**Hint**	Reminder: the values are pixels on the chosen monitor and apply when Full Screen is off. A value is applied when you press `Enter`, leave the field or click its arrows.

> **Tip** To try the settings on a PC with only one monitor, untick Full Screen and give the board a small area (for example Left 1000, Top 100, Width 800, Height 450): the board then sits next to the operator window instead of covering it.

LED Video Processor (Scaler)

An LED video processor (also called scaler or video controller) takes a normal video signal – usually 1920 × 1080 – and scales it to the pixel size of the LED screen, whatever that is (for example 768 × 384 or 2560 × 640). The scaling or cropping is set in the processor's own menu or software.

1. Set the Windows resolution of the processor's output to the processor's input resolution (often 1920 × 1080, 60 Hz), Scale 100 %.
2. On the Outputs page choose that monitor for **Standard (LED)** and tick **Full Screen** and **Show**.
3. In the processor, scale the whole input to the LED (or choose the part of the input it should show).

When the processor takes only a fixed part of its input (for example the top 1920 × 480 of a 1920 × 1080 signal for an LED strip), untick Full Screen and type that part: Left **0**, Top **0**, Width **1920**, Height **480**. The design adapts its layout to the shape of the window:

A 1920 × 480 Strip

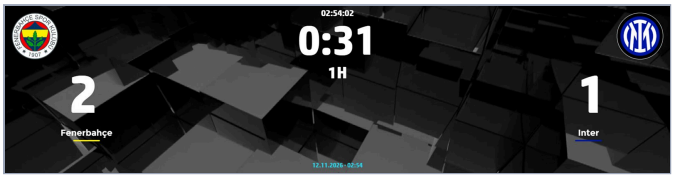


Figure 67. The St board in a 1920 × 480 area (Full Screen off, Left 0, Top 0, Width 1920, Height 480)

LED Sender Card (Direct Connection)

An LED sender card (sending card or LED controller box) is connected straight to the PC and does **not** scale. It takes a pixel area of its HDMI / DVI input – usually starting at the top left corner – and sends exactly those pixels to the LED cabinets; the rest of the picture is ignored. Which area it takes and how the cabinets are arranged (the "LED mapping") is set in the LED vendor's software; that part belongs to the LED supplier.

So the board must sit exactly on that area, pixel for pixel:

1. Set the Windows resolution of the sender card's output to what the card expects (often 1920 × 1080), Scale 100 %.
2. On the Outputs page choose the sender card's monitor for **Standard (LED)**.
3. Untick **Full Screen**.
4. Type **Left 0** and **Top 0** (the corner where the card's mapping starts – if the vendor software starts the LED elsewhere, type that position).
5. Type the LED size in pixels as **Width** and **Height**, for example 384 × 192.
6. Tick **Show**. The board appears on the LED at once.

LED screen	Full Screen	Left	Top	Width	Height
3 × 2 cabinets of 128 × 96 pixels	off	0	0	384	192
Wall of 768 × 384 pixels	off	0	0	768	384
Long strip of 1920 × 480 pixels	off	0	0	1920	480
Mapping starts at x 0, y 200 in the vendor software	off	0	200	LED width	LED height
LED of exactly 1920 × 1080	on	–	–	–	–

The Sender-Card Area on the Outputs Page

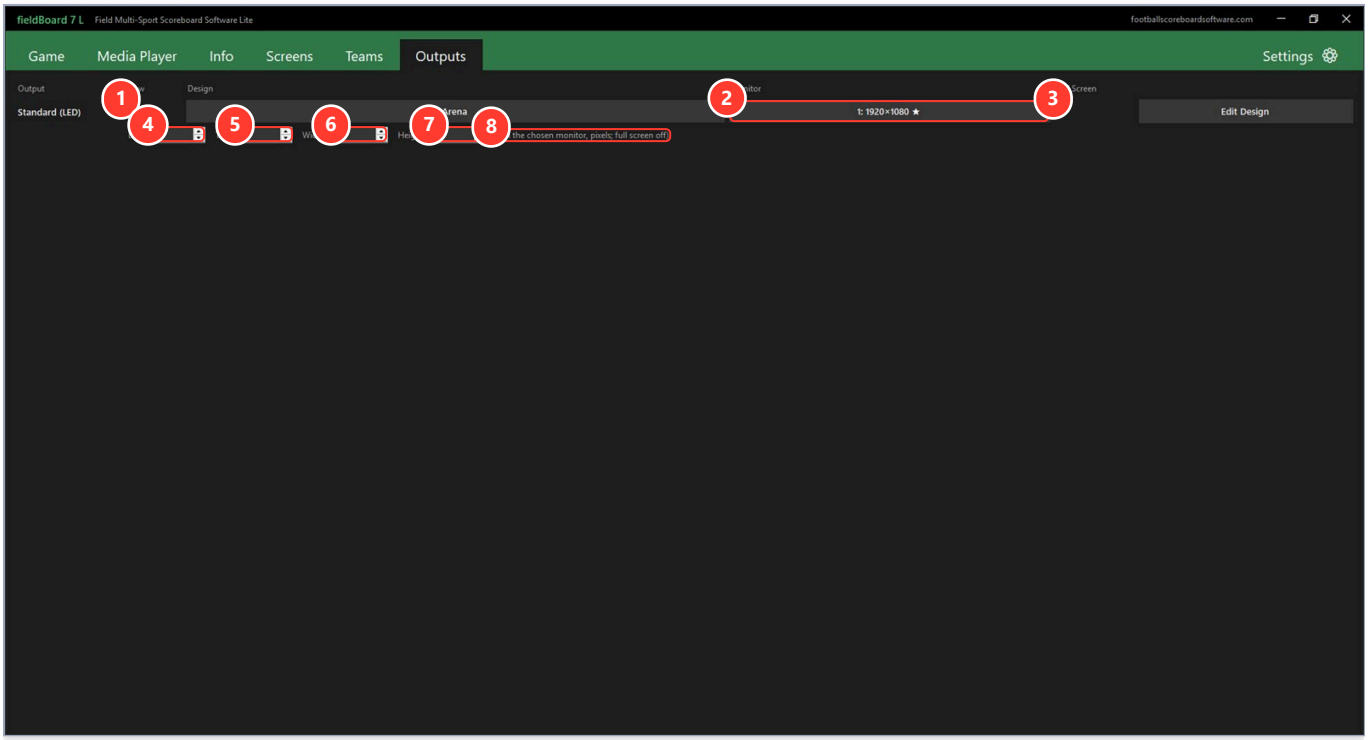


Figure 68. Standard (LED) on a 384 × 192 area at the top left of the sender card's monitor

#	Control	What it does
1	**Show**	Opens the St board window at once. It stays on, and the program opens it again by itself at every start.
2	**Monitor**	The display the board goes to: number, resolution, ★ = the main display of Windows. Choose the display that is the TV, the video processor or the sender card.
3	**Full Screen**	**Not ticked**: the board uses the rectangle of the four fields below instead of the whole monitor.
4	**Left**	Distance from the left edge of the chosen monitor in pixels. **0** = the left edge (sender cards map the LED from there).
5	**Top**	Distance from the top edge of the chosen monitor in pixels. **0** = the top edge.
6	**Width**	The width of the LED screen in pixels (here 384). At least 160.
7	**Height**	The height of the LED screen in pixels (here 192). At least 90.
8	**Hint**	Reminder: the values are pixels on the chosen monitor and apply when Full Screen is off. A value is applied when you press `Enter`, leave the field or click its arrows.



Figure 69. The board in the 384 × 192 window: the design arranges itself for the small screen

Several Outputs

fieldBoard 7 L has one board output, **St**. Choose the monitor and area of your LED screen for it as described above. The Pro edition of the program adds further outputs for more screens (see *Pro and Lite Editions* in the introduction).

Pixels, Monitors and Window Scaling

- Left, Top, Width and Height are pixels **on the chosen monitor**: 0 / 0 is the top left corner of that monitor, wherever it stands in the Windows arrangement (also left of or above the main display). Width and Height are at least 160 × 90.
- A value is applied when you press `Enter`, leave the field or click its arrows; the board moves at once.
- The program remembers the monitor by its Windows name as well as by its number. If Windows changes the order of the monitors (after a driver update or when a monitor is added), the board still finds its monitor.
- If the chosen monitor is not connected at the start, the board opens on the last monitor of the list (on a PC with one monitor: on the operator screen). Connect the device or switch it on: when Windows reports the change, the board moves back to its place by itself – also when you change a resolution while the program runs.
- A board on another monitor than the operator window stays on top of other windows and of the taskbar, and the mouse pointer is hidden over it. A board on the operator's own monitor is a normal window (the operator window can come in front of it).
- Set Scale to 100 % for the LED monitor in the Windows display settings (see above); the operator monitor may use any scale.

A One-Time Setting

- **Saved automatically.** There is no Save button: every change on the Outputs page (Show, Monitor, Full Screen, Left / Top / Width / Height, design) is saved at once in *data\config\outputs.json*.
- **Restored at every start.** When fieldBoard 7 L starts, every output that was on opens again by itself on the same monitor, at the same place, with the same design. Start the program and the board is on the LED.
- **Not before every match.** Repeat the setting only when the hardware changes: another LED size or mapping, another processor or sender card, another Windows resolution, another cable / graphics output, or a new PC.
- **New PC or reinstallation.** Copy the *data* folder (see *Files and Folders*); the outputs open at the same place on a PC with the same monitor arrangement.

Troubleshooting the LED Output

Problem	What to do
The board is on the wrong screen.	Choose the other entry in **Monitor** (pick it by its resolution). Check that Windows uses **Extend** (`Win` + `P`).
The operator window appears on the LED.	Windows is in *Duplicate* mode or the LED is the main display: choose **Extend** and make the operator monitor the main display in the Windows display settings.
Black borders around the board on the LED.	Sender card: Width and Height must be exactly the LED size in pixels, Left / Top the start of the mapping. Video processor: use Full Screen and let the processor scale the whole input.
Part of the board is cut off.	The area is larger than the LED mapping, or Left / Top are wrong, or the Windows resolution differs from the one the device expects. Check the values against the LED vendor software.
The board looks soft or blurry.	Set Scale to 100 % and the device's own resolution for the LED monitor in the Windows display settings. A processor that scales a small signal up also softens it.
The taskbar or another window covers the board.	Put the board on its own monitor (not the operator's): there it stays on top. On the operator's monitor it is a normal window.
The mouse pointer shows on the LED.	The pointer is hidden over a board on its own monitor; move the mouse back to the operator monitor. Arrange the monitors in the Windows display settings so that the LED monitor is not in the way of the mouse (for example diagonally below).
The board did not open at the start.	Is **Show** ticked for the output? Is the device switched on and connected? Without its monitor the board opens on the last monitor of the list and moves back as soon as Windows reports the monitor again.
The board is on the monitor but the LED stays dark.	Check the input selection of the processor, and the sender card, its mapping and brightness in the LED vendor's software – these are outside fieldBoard 7 L.

10 Media Player

The **Media Player** page puts videos, pictures, sound files and web pages on the board instead of the scoreboard: a walk-on video, sponsor clips, a half-time slide show, a stream or a YouTube link. It has one playlist. A clip plays on the St board.

- The St output must be open (Outputs page or the St button); otherwise the page asks you to switch it on first.
- Playback goes on while you work on other pages. While a clip plays, the **Settings** tab shows the time left (▶ m:ss) and the taskbar button shows a progress bar.
- The scoreboard comes back with the **Game** tab, with Stop / Finish, at the end of a single clip, and – with *Return to the Scoreboard* on – at the end of the playlist.
- A picture stays on the board for the **Image Play Duration** of the Settings page (default 5 seconds), then the playlist goes on.
- While something plays, the playlist cannot be changed (Add Clip, Delete Clip are hidden or blocked).

The Media Player Page

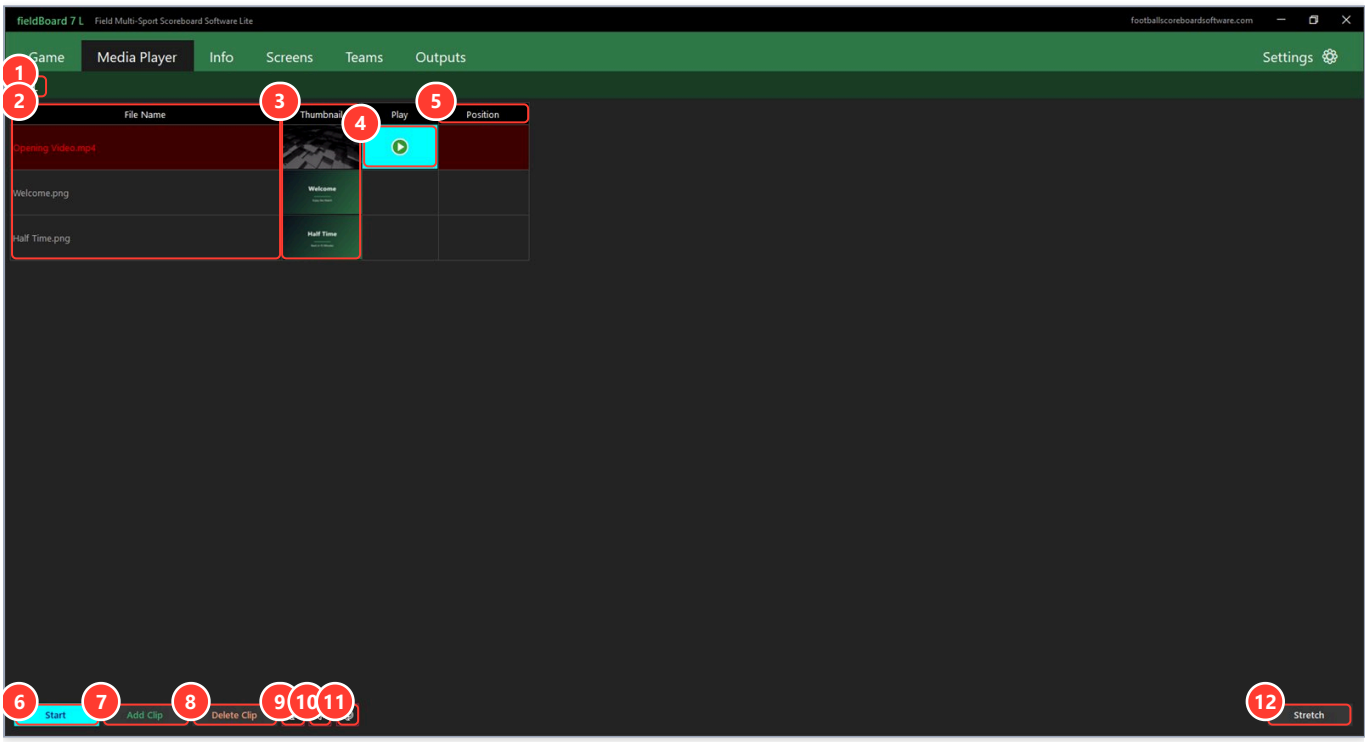


Figure 70. The Media Player page with three clips

#	Control	What it does
1	**URL**	Opens the list of web addresses (web pages, streams, YouTube links) to show on the board (below).
2	**File Name**	The clips of the playlist. Videos in white, pictures in grey, a file that no longer exists in red (it is skipped). The tooltip shows the full path. Drag a row up or down to change the order.
3	**Thumbnail**	A small picture of the clip (videos: the Windows thumbnail).
4	**Play**	The selected row has a turquoise ▶ button: it plays this one clip on the board (with Repeat on: again and again).

#	Control	What it does
5	Position	While a clip plays: the time left (m:ss).
6	Start	Plays the playlist from the selected row to the end. Start switches Repeat off. While the playlist runs the button says **Finish** and stops it.
7	Add Clip	Adds videos (MP4, M4V, WEBM, MOV, MKV, OGV), sound files (MP3, M4A, AAC, WAV, OGG) and pictures (BMP, GIF, JPG, PNG, WEBP). The files are used where they are – keep them in a folder that stays.
8	Delete Clip	Removes the selected row from the playlist (the file stays).
9	Return to the Scoreboard	Green frame = on: when the playlist reaches its end the board shows the scoreboard again. Red frame = off: the playlist starts again from the top.
10	Sound On / Off	Green frame = the sound of the clips plays. Off by default.
11	Auto Repeat	Green frame = the playing clip starts again when it ends (Play of one clip).
12	Display Mode	How a clip fills the board (list below).

While a Clip Plays

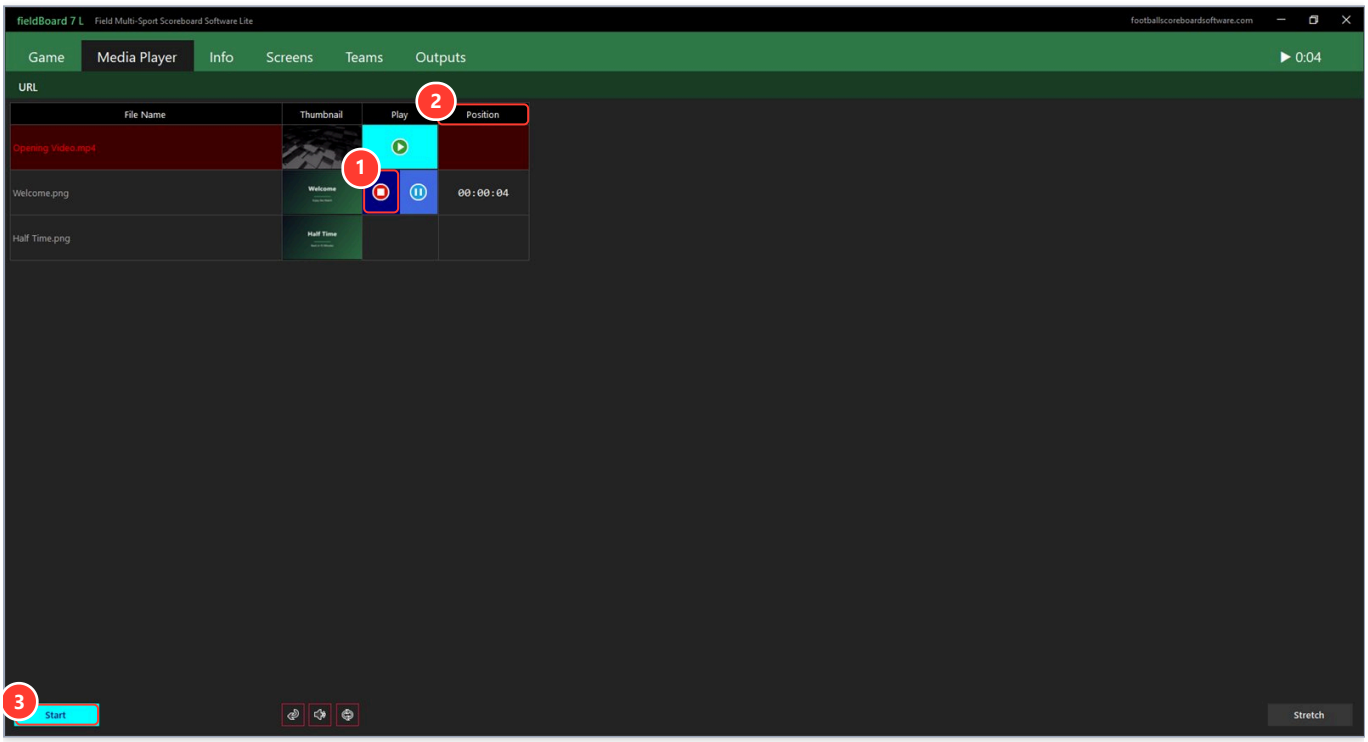


Figure 71. A slide of the playlist on the board

#	Control	What it does
1	Stop ■ / Pause ▮▮	On the playing row the Play cell turns into **Stop** (back to the scoreboard) and **Pause** (pause / continue).
2	Position	The time left of the playing clip.
3	Start	Starts the playlist (Finish while the playlist runs).

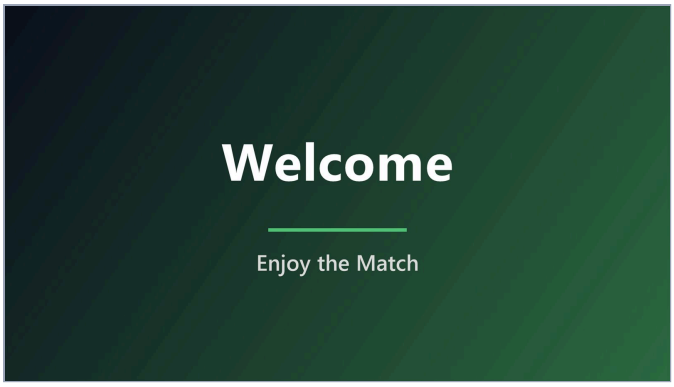


Figure 72. The St board showing the slide “Welcome” of the Media Player

Select another row while a clip plays: its Play cell offers ▶ to switch straight to that clip.

Display Modes

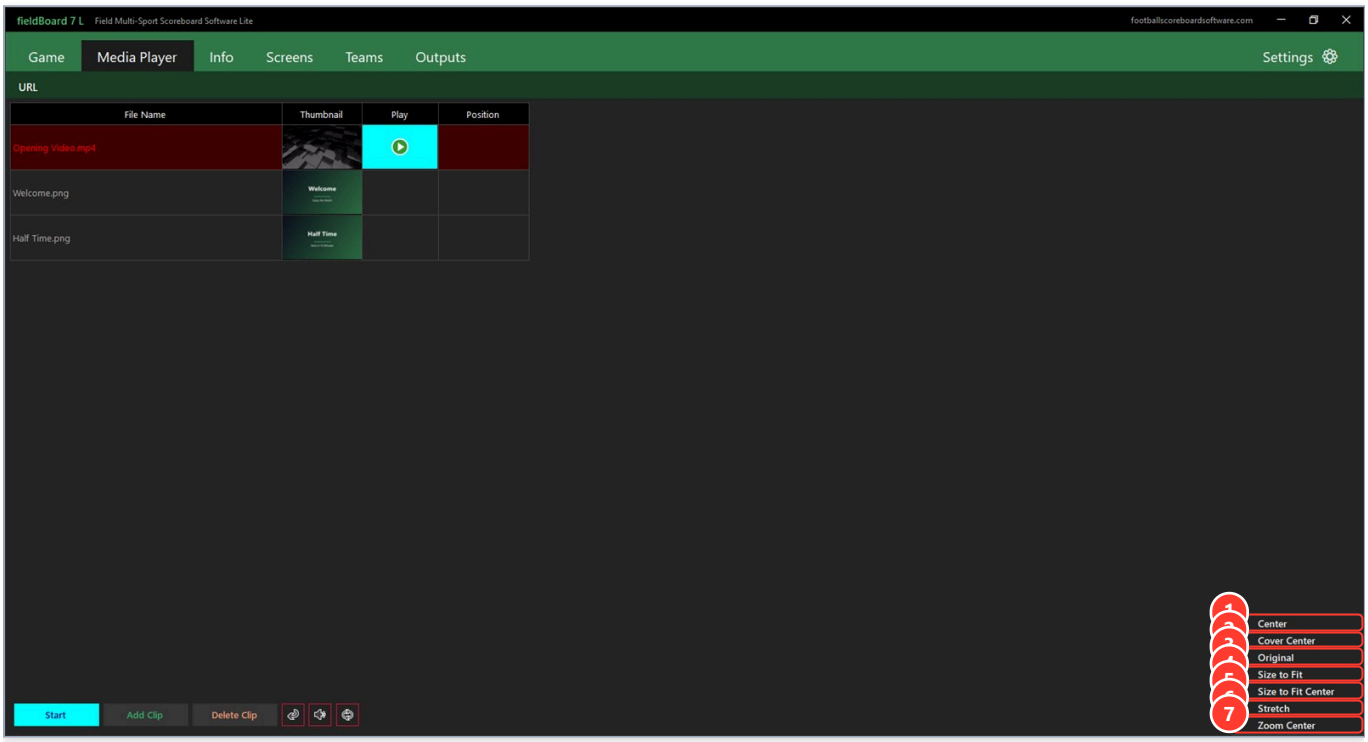


Figure 73. The display modes of the Media Player

#	Control	What it does
1	Center	Original size in the middle of the board (a large clip is cut at the edges).
2	Cover Center	Fills the board, keeps the shape, cuts the edges that do not fit.
3	Original	Original size from the top left corner.
4	Size to Fit	The whole clip as large as possible, from the top left corner (bars where the shape differs).
5	Size to Fit Center	The whole clip as large as possible, in the middle.
6	Stretch	Fills the board exactly; a clip of another shape is distorted. The default.
7	Zoom Center	Fills the board, keeps the shape, cuts the edges (like Cover Center).

Web Pages and Streams (URL)

The URL list holds web addresses that the board can show full screen: a web page, a live stream page or a YouTube link (it plays the video). The list is saved by itself.

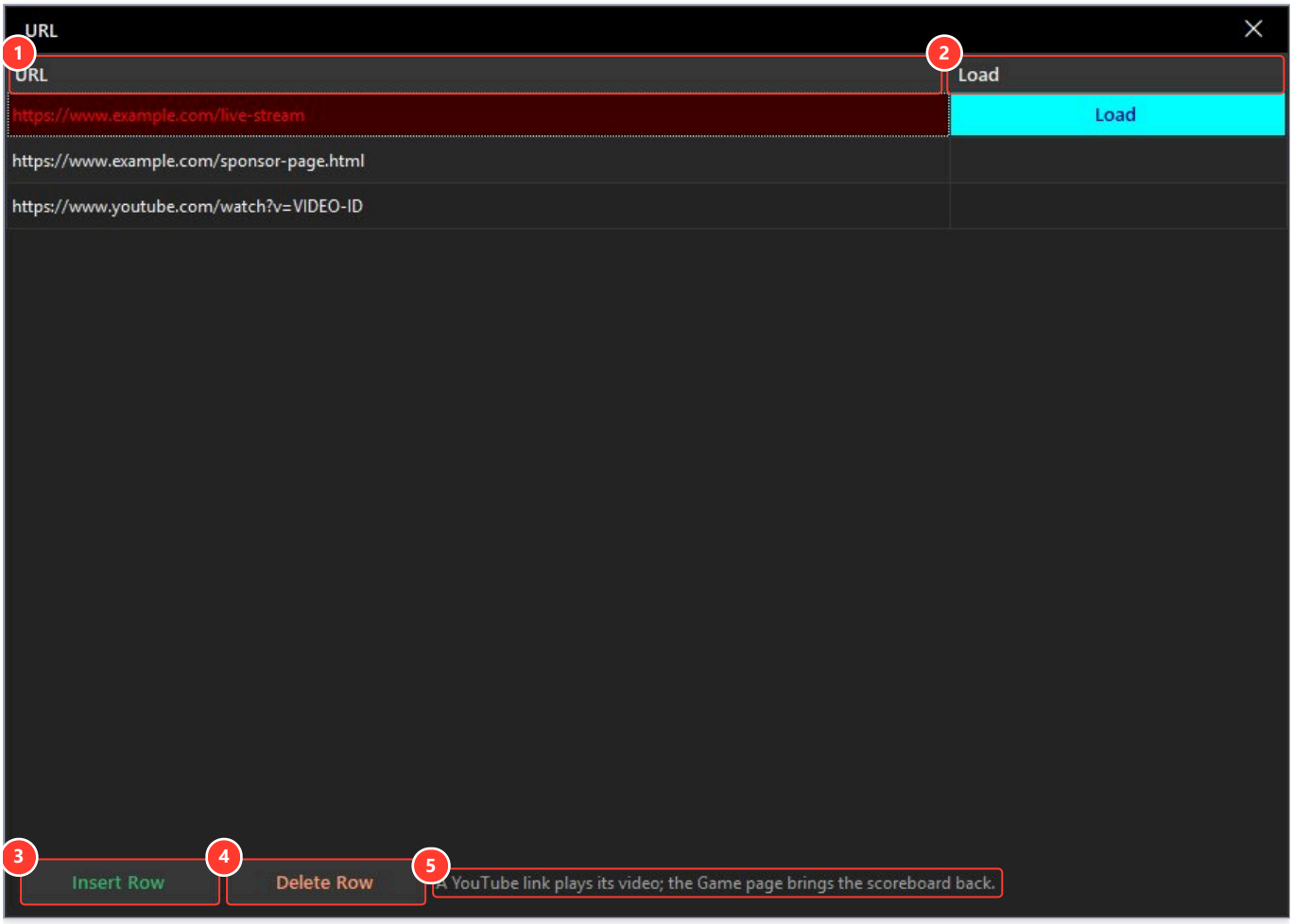


Figure 74. The URL list

#	Control	What it does
1	URL	One address per row. Click a cell and type (or press `F2`).
2	Load	The **Load** button of the selected row shows that address on the board.
3	Insert Row	Inserts an empty row above the selected one (or at the end) and starts editing it.
4	Delete Row	Removes the selected row.
5	Hint	A YouTube link plays its video; the **Game** tab brings the scoreboard back.

Media Player from the Remote Control and the Keyboard

The remote control has a **Media Player** block at the end of its panel: **Start / Finish**, **Pause**, **Next Clip** and **Back to the Scoreboard**, with a line that shows what plays and the time left. Starting a playlist from the phone opens the Media Player page on the PC.

Command (POST /api/command)	What it does
media.start	Plays the playlist from the first clip.
media.stop	Back to the scoreboard.

Command (POST /api/command)	What it does
media.pause	Pause / continue.
media.next	The next clip of the running playlist.
media.repeat, *media.volume*, *media.return* [on|off]	Auto Repeat, Sound, Return to the Scoreboard (without a value: switch over).

GET /api/media returns the state (playlist, what plays, time left, the switches). In the keyboard shortcut editor two Media Player actions can get a key (no key by default): **Start / Finish** of the playlist and **Back to the Scoreboard**.

The Media Player Block of the Remote

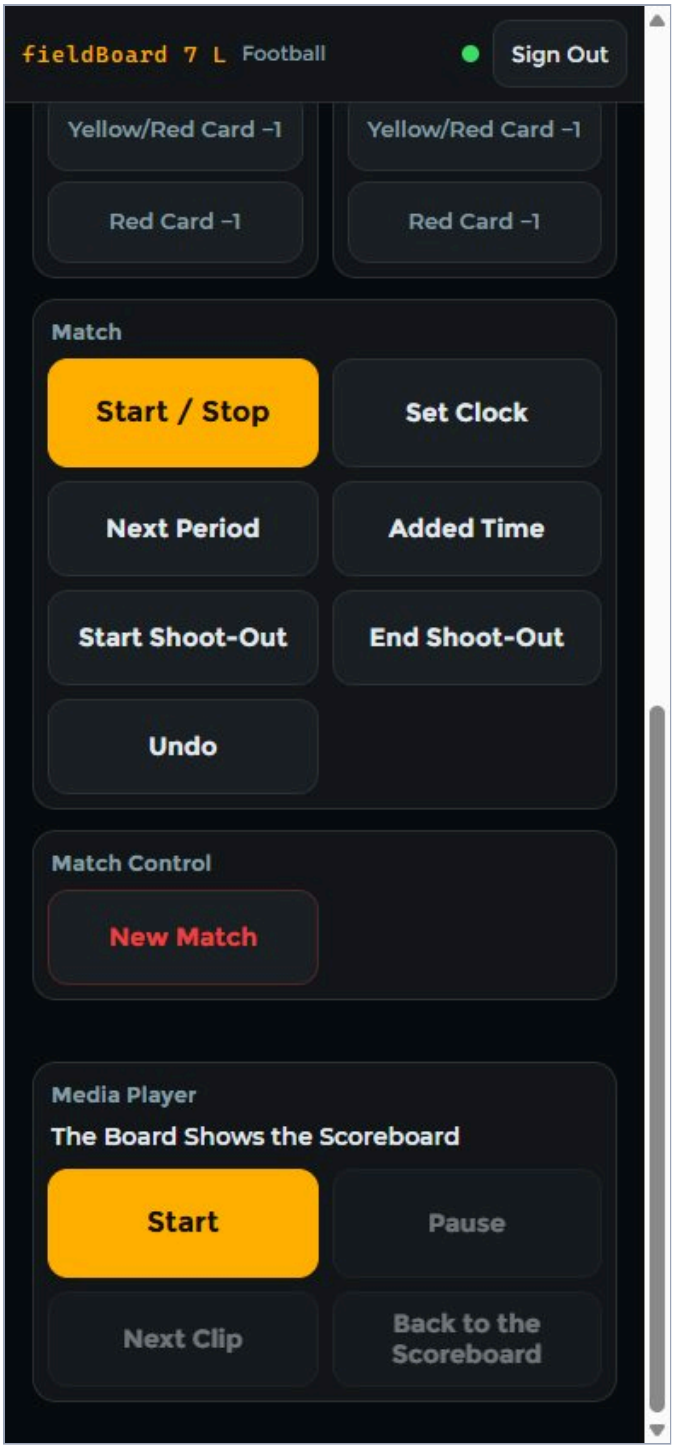


Figure 75. The Media Player block at the end of the remote panel (phone)

11 Board Designs

Every sport comes with three master designs: **Arena** (black LED look with big digits and corner logos), **Broadcast** (header strip and team rows) and **Split** (team panels left and right of a centre column). A design contains all screens of the St board.

Master designs are read-only. To change one, open it in the editor and save a copy: the copy is an **own design** that you can change, rename and delete. Program updates never change your own designs.

Preview Design (Design Gallery)

Click the design icon under St on the output strip of the Game page. The gallery shows every design of the running sport, rendered live with the current match.

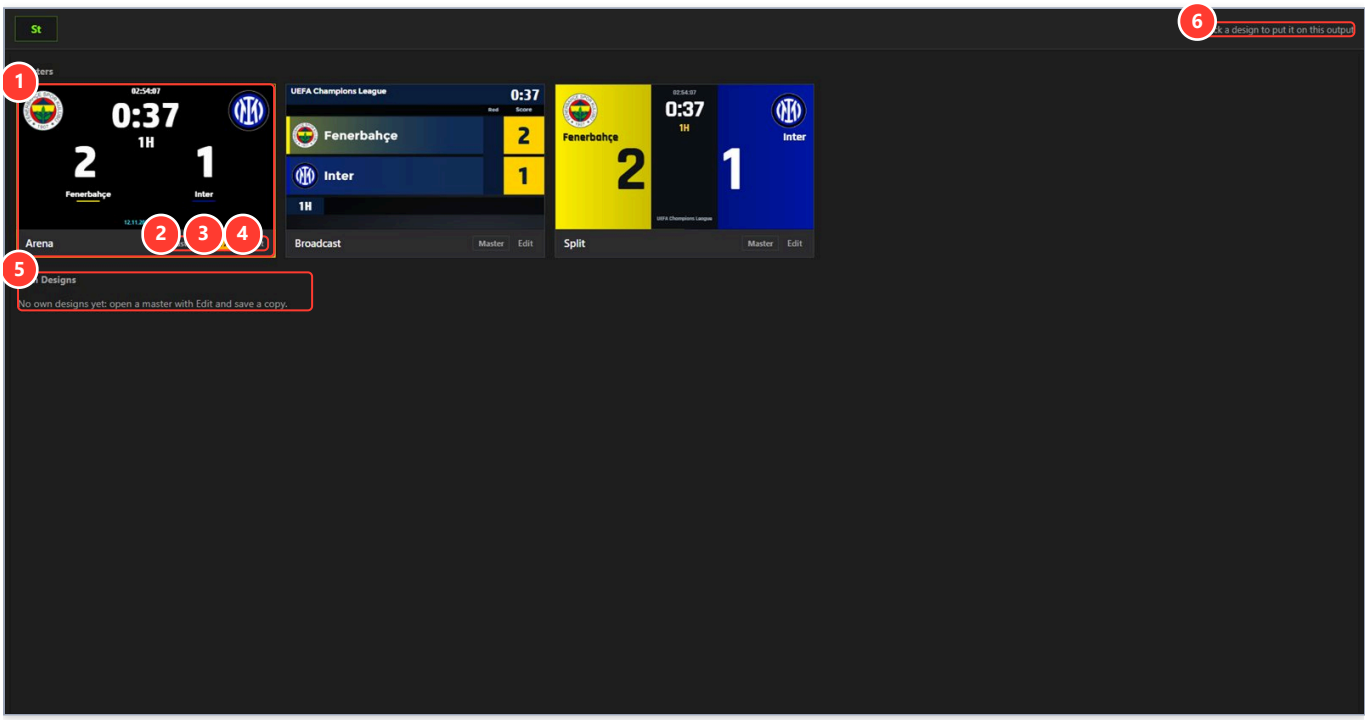


Figure 76. The design gallery

#	Control	What it does
1	**Design card**	A live preview of the design's game screen for that output. **Click the card** (or press `Enter`) to put this design on the chosen output at once.
2	**Master / Own**	Whether the design is a factory master or one of your own designs.
3	**On Air**	Marks the design the output uses now (the card also has an amber frame).
4	**Edit**	Opens this design in the design editor.
5	**Own Designs**	Your own copies. Until you save a copy of a master, this part says that there are no own designs yet.
6	**Hint**	Reminder: a click on a design puts it on this output.

The gallery follows the match live. Close it with `Esc` or the window button. The design choice is saved per sport and output; it is the same choice as the Design list on the Outputs page.

The Design Editor

Open the editor with **Edit** in the gallery or **Edit Design** on the Outputs page. What you see on the canvas is exactly what goes on air.



Figure 77. The design editor

#	Control	What it does
1	Sport	The sport whose designs are edited.
2	Design	The design to edit (masters and own designs). A lock marks a read-only master.
3	Save / Save a Copy / Rename / Delete	**Save** (`Ctrl` + `S`) stores the changes of an own design; outputs that use it update at once. **Save a Copy** asks for a name and creates a new own design. **Rename** and **Delete** work on own designs only (Delete asks first and cannot be undone).
4	Screens	All St screens of the design: St Game, the info screens, St Game Players and the event screens. Click a tab to edit that screen; the arrows scroll the row.
5	Read-only notice	Shown for factory masters: **Save a Copy** creates your own editable copy.
6	Add Element	Adds a **Text**, a **Data Field** (any value of the match: score, clock, names, fouls …), a **Box**, a **Team Logo**, an **Image** (up to 8 MB).
7	Layers	All elements of the screen, the top one in front. Per element: show / hide (eye), lock, bring forward ▲, send backward ▼. Click a name to select it; names in italics are hidden by a rule at the moment (e.g. penalty elements while no penalty runs).
8	Undo / Redo	`Ctrl` + `Z` / `Ctrl` + `Y`.
9	Duplicate / Delete	Duplicates the selected elements (`Ctrl` + `D`) or deletes them (`Del`).
10	Align and distribute	Aligns several selected elements left, centre, right, top, middle or bottom, or spaces them evenly.
11	Preview Size	Checks the design at 1920 × 1080, 1280 × 1024, 1920 × 480 or 1080 × 1920. Positions are relative to the edges, so one design fits several screen shapes.

#	Control	What it does
12	**Preview Data**	Sample match data on the canvas: a mid-match situation, or a special moment (penalties, timeouts, possession …) to check elements that only appear then.
13	**Preview**	Hides the selection frames and handles to see the screen as on air.
14	**Scale**	The preview size, the editor unit (1 u = 1 % of the smaller side), the screen in units and the zoom of the canvas.
15	**Canvas**	Click to select, drag to move, drag the handles to resize. `Shift`+click or drag a frame to select several. Arrow keys move by 0.5 units, `Shift`+arrow by 5.
16	**Properties / Theme / Scene JSON**	**Properties**: position, size, text, data field, font, colours and rules (e.g. turn red when the shot clock runs out) of the selected element. **Theme**: theme presets, digit and text font and the colour tokens – a colour change applies to every element and screen that uses it. **Scene JSON**: the screen as text, for advanced users (**Apply** checks and loads it).

> **Tip** Change colours in the **Theme** tab first: one change recolours the whole design on every screen. Use element properties only for single exceptions.

12 Settings

Open **Settings** ⚙ at the right end of the tab strip. All settings are stored in *data\config\settings.json*.

The Settings Page

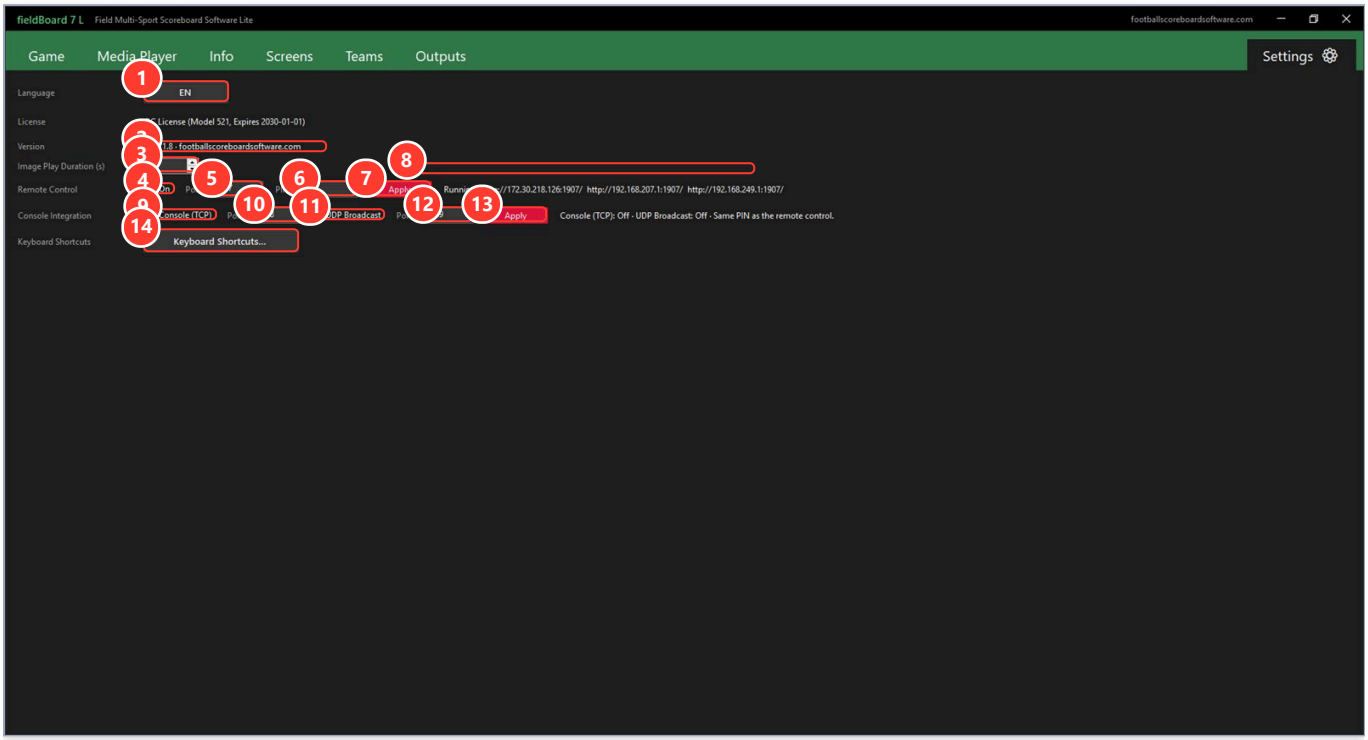


Figure 78. The Settings page

#	Control	What it does
1	**Language**	The language of the program, the board texts and the remote control pages (sign-in page, headings, buttons and questions on the phone follow it). Click to open the list of languages (the same list as on the right strip of the Game page). The new language is used after a restart.
2	**Version**	Program version and web site.
3	**Image Play Duration (s)**	How long a picture of a Media Player playlist stays on the board before the next clip (1–3600 seconds, default 5). Videos always play to their end.
4	**Remote Control: On**	The built-in web server for phones and tablets (and the HTTP API). On by default.
5	**Port**	The TCP port of the web server (default 1907).
6	**PIN**	The PIN a phone needs to sign in (four random digits are set on the first start). Empty = nobody can sign in. A new PIN applies to new sign-ins.
7	**Apply (remote)**	Saves the three values (On, Port, PIN) and restarts the server. The button sits on the same line as the text boxes.
8	**Status and addresses**	**Running** and the addresses to open on the phone (one per network adapter), or **Off** / **Not running** with the reason (e.g. the port is in use).
9	**Console (TCP)**	The console link for table consoles, statistics and automation software (default port 1908, off by default). Uses the same PIN.

#	Control	What it does
10	**Console port**	TCP port of the console link.
11	**UDP Broadcast**	Sends every change of the board as UDP datagrams to the local network (off by default). No PIN; listeners only receive.
12	**UDP port**	The UDP port of the broadcast (default 1909).
13	**Apply (console)**	Saves the console and UDP settings and restarts the services. The status line shows Off / Running (with the number of connected consoles).
14	**Keyboard Shortcuts…**	Opens the keyboard shortcut editor.

Choosing the Language

Click the language button at the top of the right strip on the Game page (or the Language field of the Settings page). The list shows every language by its code; the current one is ticked.

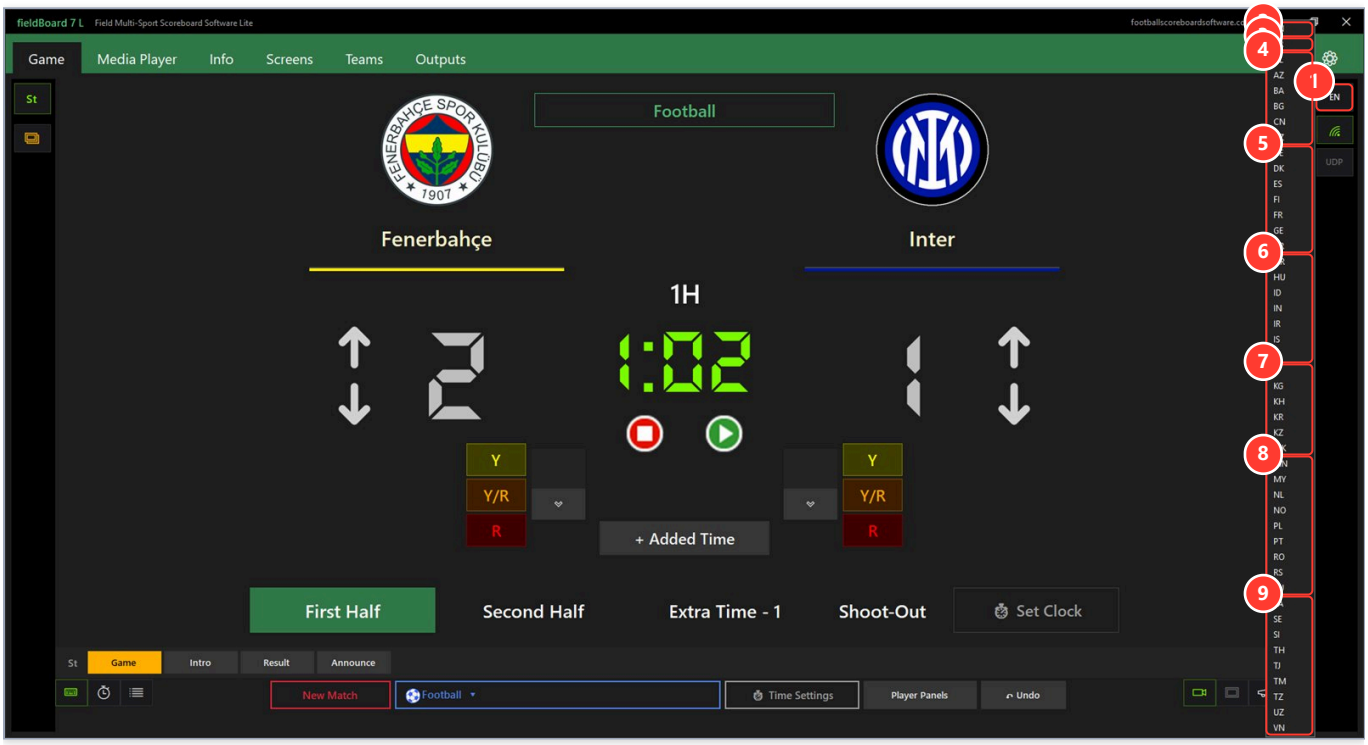


Figure 79. The language menu on the right strip

#	Control	What it does
1	**Language button**	Shows the current language code and opens the menu.
2	**EN**	English – the language of this guide and the fall-back for every text that a language file does not have.
3	**TR**	Turkish.
4	**AL · AZ · BA · BG · CN · CZ**	Albanian, Azerbaijani, Bosnian, Bulgarian, Chinese, Czech.
5	**DE · DK · ES · FI · FR · GE · GR**	German, Danish, Spanish, Finnish, French, Georgian, Greek.
6	**HR · HU · ID · IN · IR · IS · IT**	Croatian, Hungarian, Indonesian, Hindi, Persian (written right to left), Icelandic, Italian.

#	Control	What it does
7	JP · KG · KH · KR · KZ · MK	Japanese, Kyrgyz, Khmer, Korean, Kazakh, Macedonian.
8	MN · MY · NL · NO · PL · PT · RO · RS · RU	Mongolian, Malay, Dutch, Norwegian, Polish, Portuguese, Romanian, Serbian, Russian.
9	SA · SE · SI · TH · TJ · TM · TZ · UZ · VN	Arabic (written right to left), Swedish, Slovenian, Thai, Tajik, Turkmen, Swahili, Uzbek, Vietnamese.

Restart for the New Language

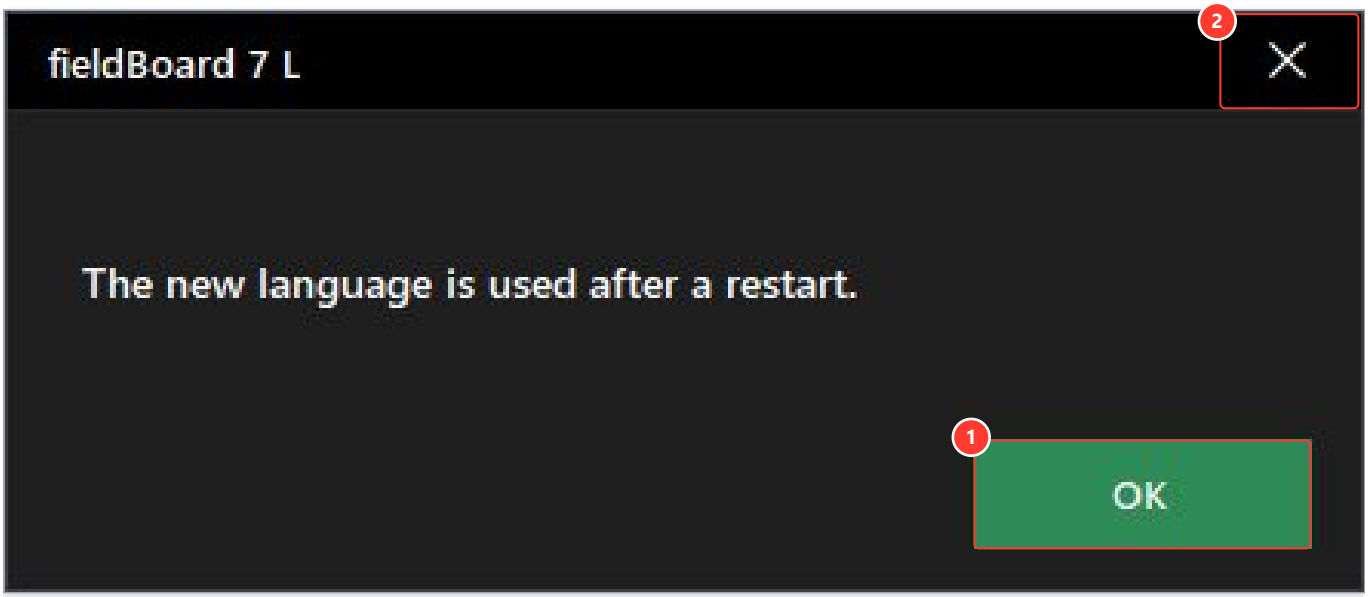


Figure 80. “The new language is used after a restart.”

#	Control	What it does
1	OK	Closes the message. The choice is already saved; close fieldBoard 7 L and start it again to switch the program, the boards and the remote to the new language.
2	Close (×)	The same as OK.

13 Keyboard Shortcuts

fieldBoard 7 L has global keyboard shortcuts: they work even while vMix, CasparCG, a browser or any other program has the focus, so you can score from a second keyboard or a numeric keypad while you work in another window. Only the F-keys `F1`–`F12` and the numeric keypad (`NumLock` on: `0`–`9`, `/`, `*`, `-`, `+`, `,`) can be used – never letters or the normal digits. The key still reaches the other program too.

Open the editor with the keyboard icon at the bottom left of the Game page or **Keyboard Shortcuts…** on the Settings page.

The Shortcut Editor

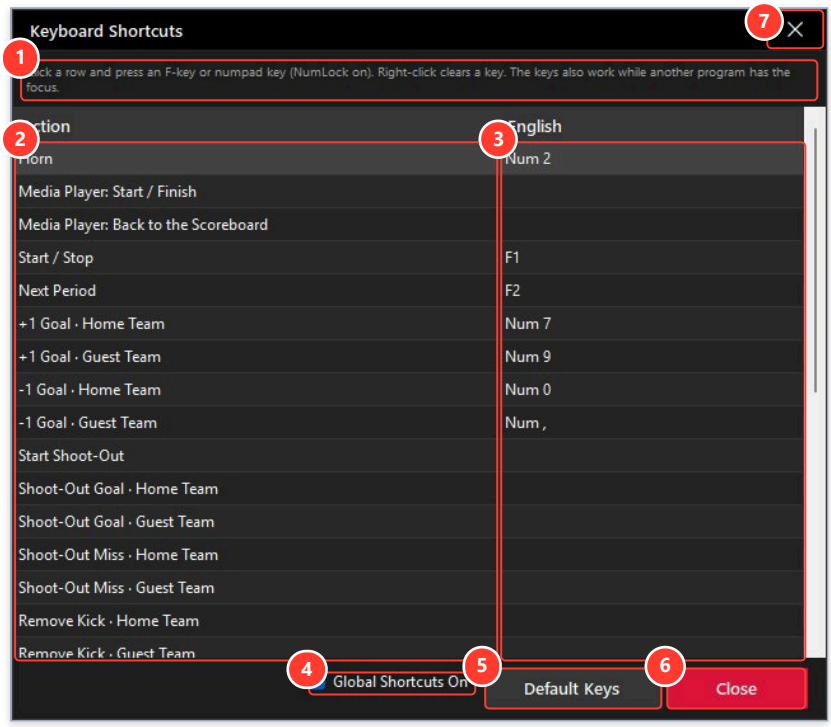


Figure 81. The keyboard shortcut editor

#	Control	What it does
1	**Help line**	How to assign and clear keys.
2	**Action**	Every action of the running sport and discipline, per team where it belongs to a team, plus the Horn. The names are the ones of the panel and the remote (*+2 Goal*, *Play Clock 40*, *Centre Pass* …). Actions that reset the match have no key, and actions that need a typed value or a choice are not listed (Set Clock, Added Time, Ball On, a cricket delivery or revised target, the lane times and lane status of swimming, the awards, dive selection and dive change of diving): use the panel or the remote for them.
3	**Key**	**Click a row**, then press an F-key or a numpad key: the key is assigned ("Press a Key…" is shown while waiting). A key belongs to one action only; it is taken away from its old action. **Right-click** a row (or press `Delete`) to clear its key. `Esc` first cancels waiting, a second `Esc` closes the window.
4	**Global Shortcuts On**	Switches all shortcuts on or off. While they are off you can still assign keys here.
5	**Default Keys**	Replaces the keys of this sport with the default keys (after a confirmation, below).

#	Control	What it does
6	**Close**	Closes the editor. Keys are saved at once.
7	**Close (×)**	The same as Close.

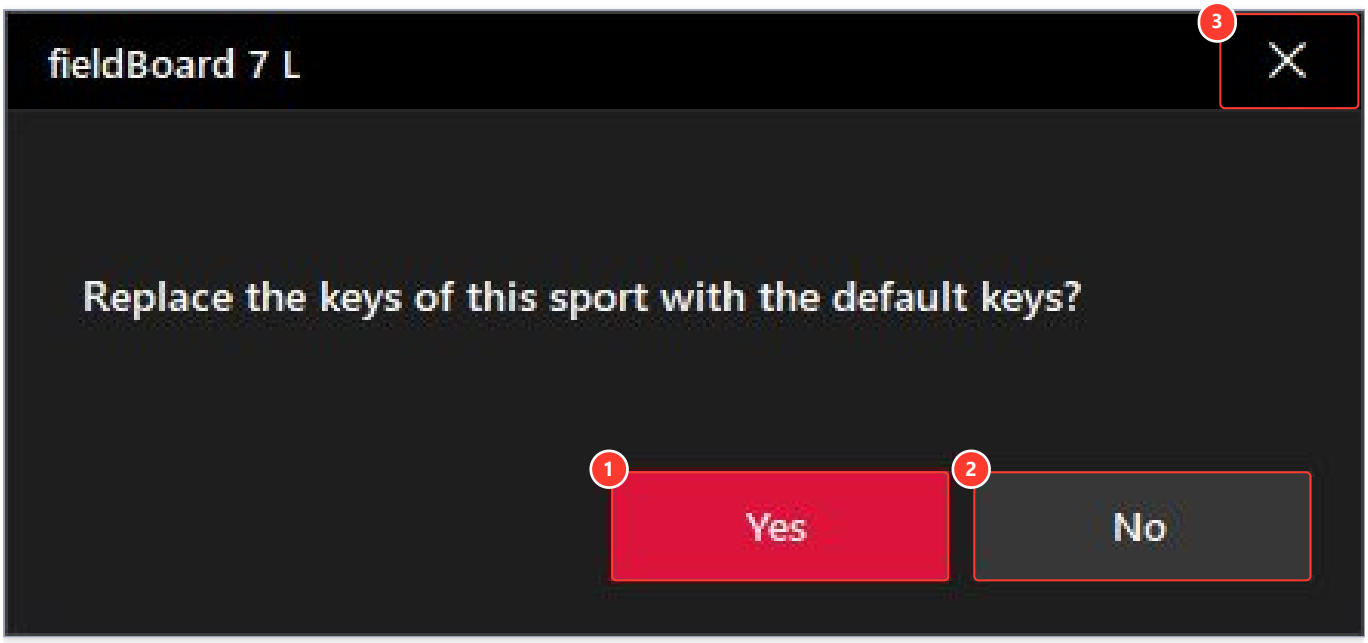


Figure 82. “Replace the keys of this sport with the default keys?”

#	Control	What it does
1	**Yes**	Every key of the running sport goes back to the default below; your own keys of this sport are lost. Other sports keep their keys.
2	**No**	Keeps your keys.
3	**Close (×)**	The same as **No**. `Esc` also answers No.

Default Keys

The keys are saved per sport in *data\config\hotkeys.json*. The default keys (when the sport has the action):

Key	Default action
`F1`	Start / stop the game clock
`F2`	Next period
`F3` / `F4`	Shot clock (American football: play clock) full reset / short reset. Where the short reset equals the full time (for example 30 / 30) there is only one reset action and `F4` stays free.
`F5` / `F6`	Timeout home / guest
`F7` / `F8`	Foul +1 / −1 home
`F9` / `F10`	Foul +1 / −1 guest
`F11`	Change possession (netball: Centre Pass)
`F12`	Undo

Key	Default action
`Num 7` / `Num 4` / `Num 1`	Home: first / second / third score type (e.g. +1 / +2 / +3); set sports: `Num 7` point home, `Num 1` point home −1
`Num 9` / `Num 6` / `Num 3`	Guest: the same score types; set sports: `Num 9` point guest, `Num 3` point guest −1
`Num 0` / `Num /` / `Num −`	Home: take back the first / second / third score type
`Num ,` / `Num *` / `Num +`	Guest: take back the first / second / third score type
`Num 5`	End the timeout (set sports)
`Num 2`	Horn

> **Note** While you type in a text box of fieldBoard 7 L (team names, Info page, time settings), the numpad types digits and does not score. The shortcuts are switched off when you untick Global Shortcuts On.

The Actions of Each Sport

The editor lists the actions of the running sport, so it looks different for every sport:

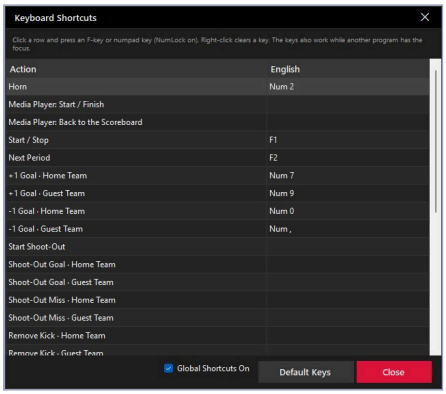


Figure 83. Football

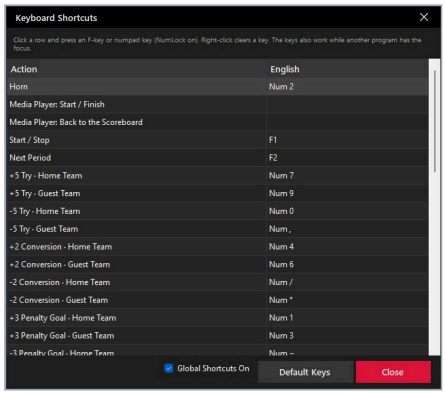


Figure 84. Rugby

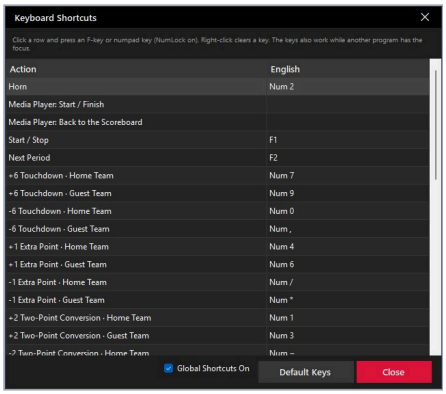


Figure 85. American Football

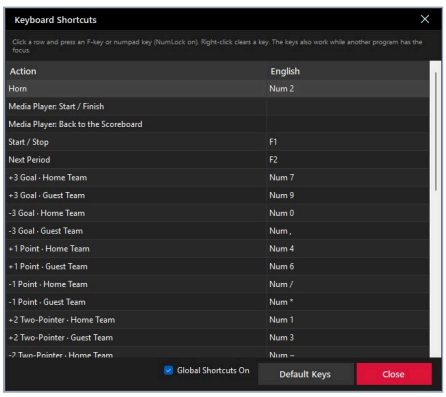


Figure 86. Gaelic Football

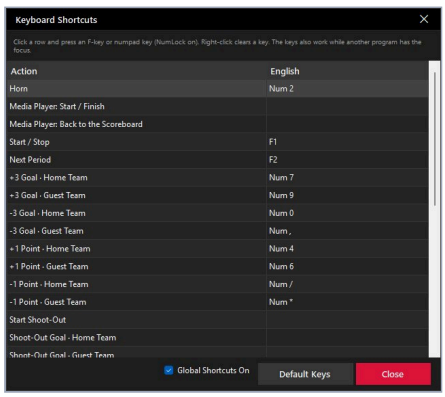


Figure 87. Hurling

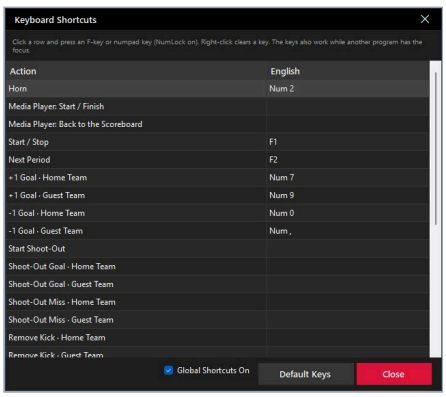


Figure 88. Hockey

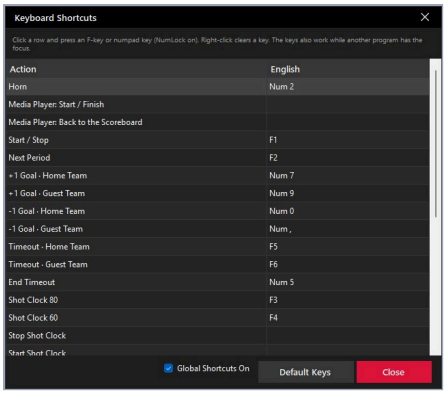


Figure 89. Lacrosse

14 Remote Control

Any phone, tablet or second PC on the same network can control the scoreboard in its web browser – no app to install. The built-in web server is on by default. The remote builds its buttons from the running sport and discipline, so one page serves every sport; the buttons of each sport are shown in the chapter of that sport.

Connecting a Phone or Tablet

1. Connect the phone to the same network (Wi-Fi) as the scoreboard PC.
2. Open **Settings** on the scoreboard PC. The **Remote Control** row shows **Running** and one or more addresses such as *http://192.168.1.50:1907/*, and the **PIN**.
3. Type that address into the phone's browser (use the address of the adapter that is on the phone's network).
4. Enter the PIN on the number pad and press ✓.
5. The remote opens with the running sport. Score, clock and period follow the scoreboard live.

> **Tip** Add the page to the home screen of the phone (browser menu → *Add to Home Screen*): it then opens full screen like an app.

Signing In

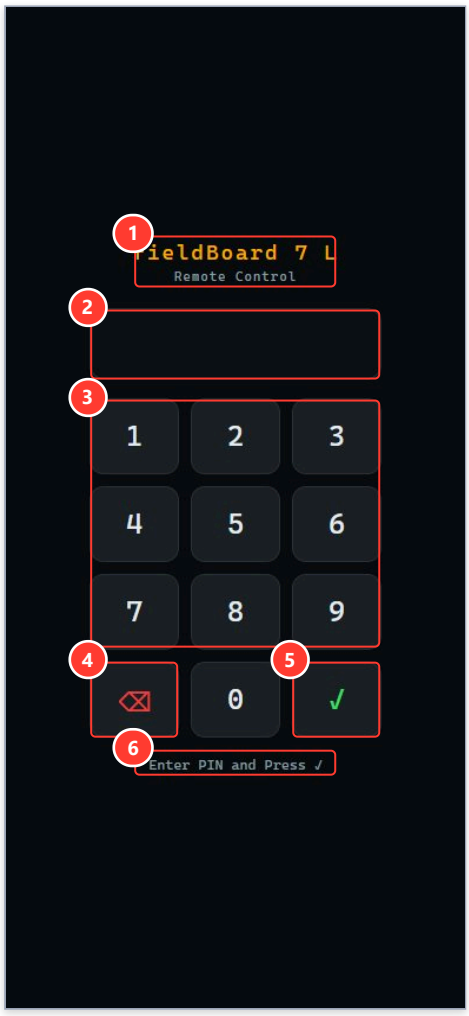


Figure 90. The sign-in page on a phone

#	Control	What it does
1	**Title**	The product name (fieldBoard 7 L) and *Remote Control*: you know at once which scoreboard you are signing in to.
2	**PIN display**	Shows a dot for every digit you typed (up to 8). The PIN itself is never shown.
3	**Number pad**	Tap the digits of the PIN. On a PC the number keys, `Backspace` and `Enter` work too.
4	**⌫ Delete**	Deletes the last digit.
5	**✓ Sign In**	Sends the PIN. Right: the panel opens. Wrong: the line below says so.
6	**Hint line**	“Enter PIN and Press ✓”, “Signing In…”, a wrong PIN, “No Connection to the Scoreboard”, or the lockout countdown “Too Many Wrong PINs. Wait … s”. These texts, like every text of the remote pages, are in the language of the program (see *Settings*).

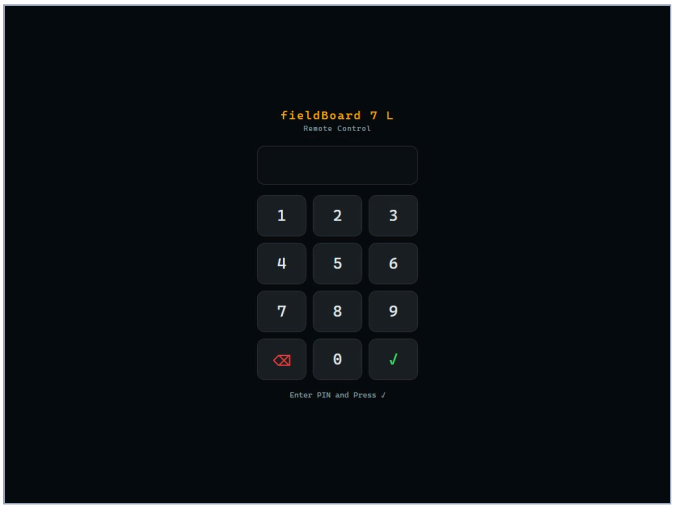


Figure 91. The same page on a tablet

- After five wrong PINs from one device it is locked for 30 seconds; every further wrong PIN doubles the wait, up to 15 minutes. The pad is disabled while the countdown runs.
- The sign-in lasts while the browser tab is open; a device that is still signed in skips the PIN page. Closing the tab ends it.
- An empty PIN in Settings switches the remote sign-in off.

The Remote Panel

On a tablet (or a phone held sideways, from 760 pixels width) the two teams stand side by side with two buttons per row, next to the Match column; on a phone held upright the two teams stay side by side and the Match and Match Control sections follow below, so you scroll down to them. The layout is the same in every sport:

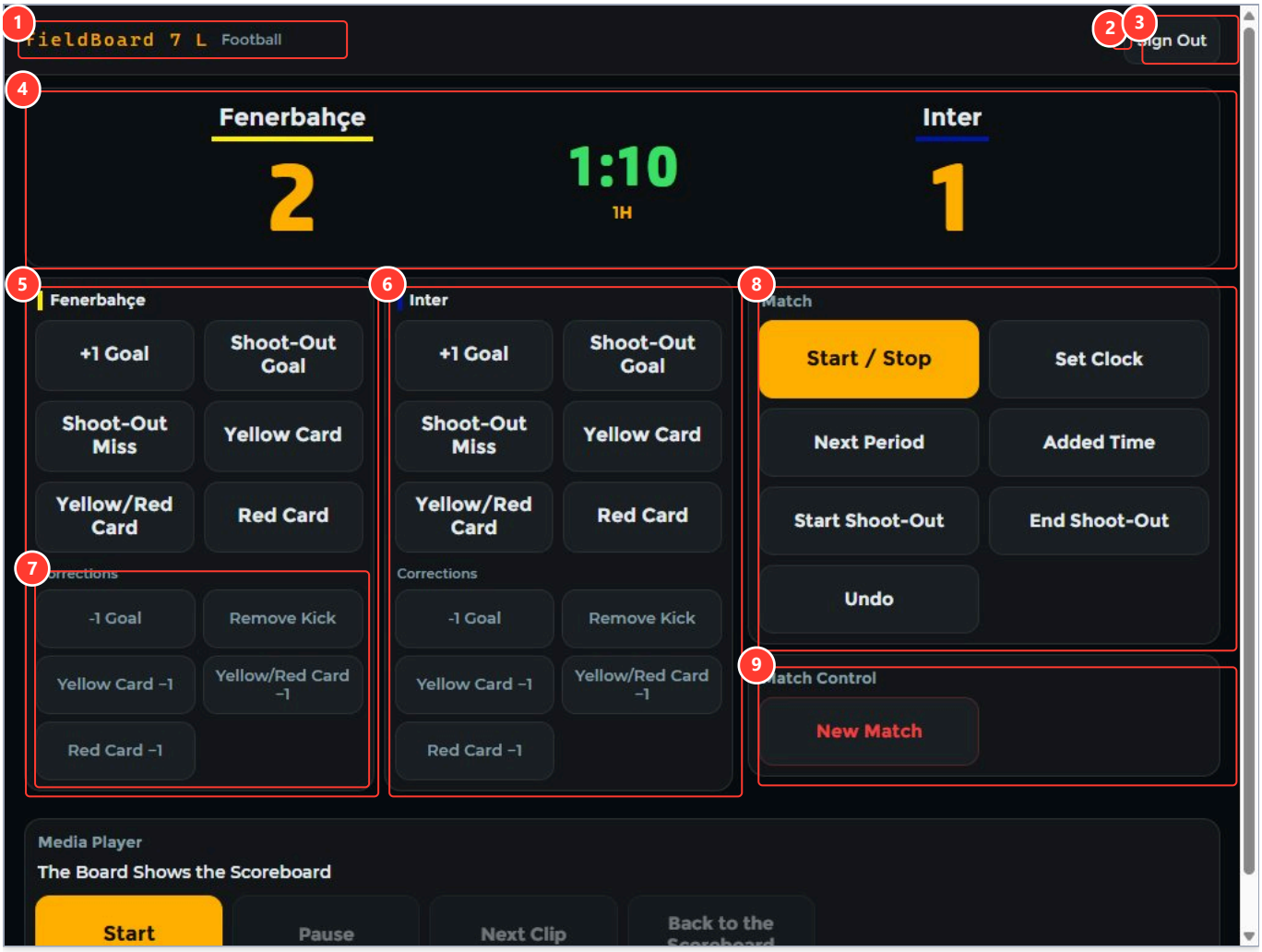


Figure 92. The remote panel on a tablet (Football)

#	Control	What it does
1	Title and sport	The product name (fieldBoard 7 L), then the running sport and discipline (shown once when the discipline name already contains the sport, e.g. just *Football*; a long text takes two lines). The page rebuilds itself after a new match or a change of sport.
2	Connection dot	Green while the remote receives the scoreboard; red when the connection is lost (it reconnects by itself).
3	Sign Out	Asks “Sign Out?” and returns to the PIN page.
4	Score	Team names in their colours (a long name takes two lines instead of being cut), scores, clock, period, shot clock and chips such as fouls, timeouts or possession – live from the scoreboard. A **Penalties** chip (the number of running penalties) appears only in sports with timed penalties; netball shows **Centre Pass** instead of Possession.
5	Home team	The actions of the home team (goals or points, fouls, timeouts, cards …), headed by the team name (two buttons per row on a tablet, one on an upright phone). A score button shows its value once: *+2 Goal*, *+6 Goal*, *+1 Free Throw*. A long label wraps between words onto a second line.
6	Guest team	The same actions for the guest team.
7	Corrections	The −1 actions of the team (take back a goal, a foul, a card …), small so they are not hit by mistake.

#	Control	What it does
8	Match	Actions that belong to the match: **Start / Stop** (amber), Set Clock, Next Period, shot clock, timeouts, Undo … Actions that need a value (Set Clock) open an input sheet.
9	Match Control	Actions that reset or end something (**New Match** …). They always ask for a confirmation and cannot be undone from the remote.

- Every button does exactly what the same control on the panel does, including Undo. Several devices can be connected at the same time, also together with the operator at the PC.
- A refused action (for example a timeout when none is left) shows its reason in a red message at the bottom.
- The remote pages use the language of the program: headings (Match, Corrections, Match Control), the action labels, the chips, the sheets (OK / Cancel, Yes / No) and the messages are shown in the language chosen in Settings; the browser tab shows the product name and the sport.
- Swimming and diving have their own remote view (heat and lanes, or diver, judges and standings).
- At the end of the panel the **Media Player** block starts and stops the clips of the Media Player (see *Media Player*).

Running Penalties on the Remote

In sports with time penalties the phone lists the running penalties of a team under its buttons: number, time left and a red ✕ that takes exactly that penalty off early (the same as the ✕ on the Game page). The list appears only while a penalty runs.

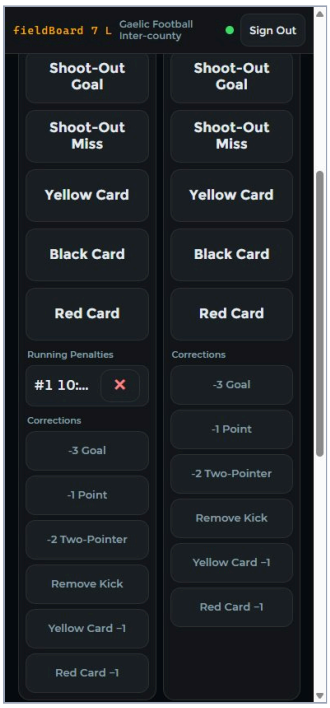


Figure 93. Gaelic Football: a running penalty on the phone

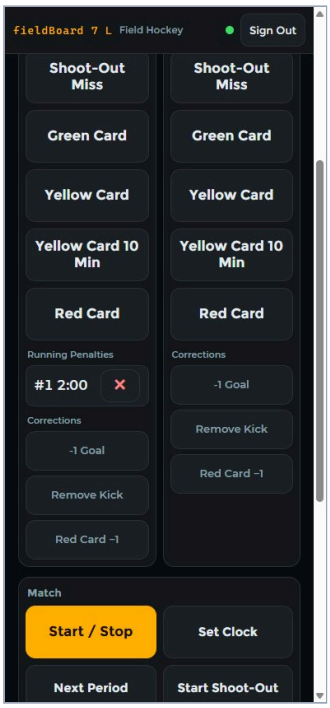


Figure 94. Hockey: a running penalty on the phone

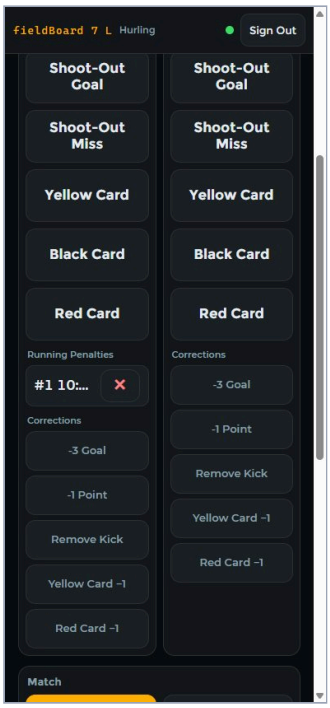


Figure 95. Hurling: a running penalty on the phone

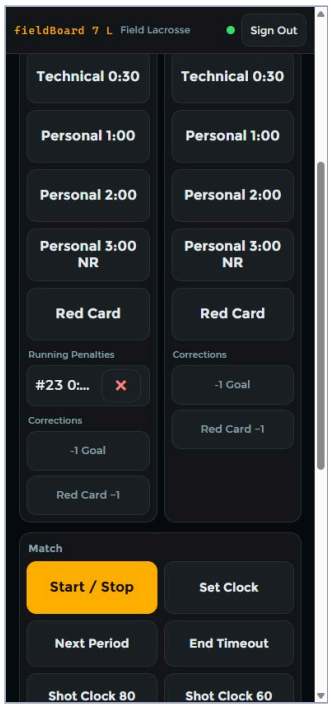


Figure 96. Lacrosse: a running penalty on the phone

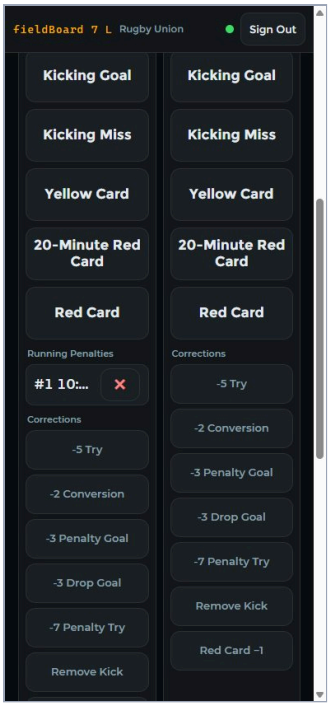


Figure 97. Rugby: a running penalty on the phone

Input and Confirmation Sheets

Some buttons need more than a tap. The remote then shows a sheet at the bottom of the screen:

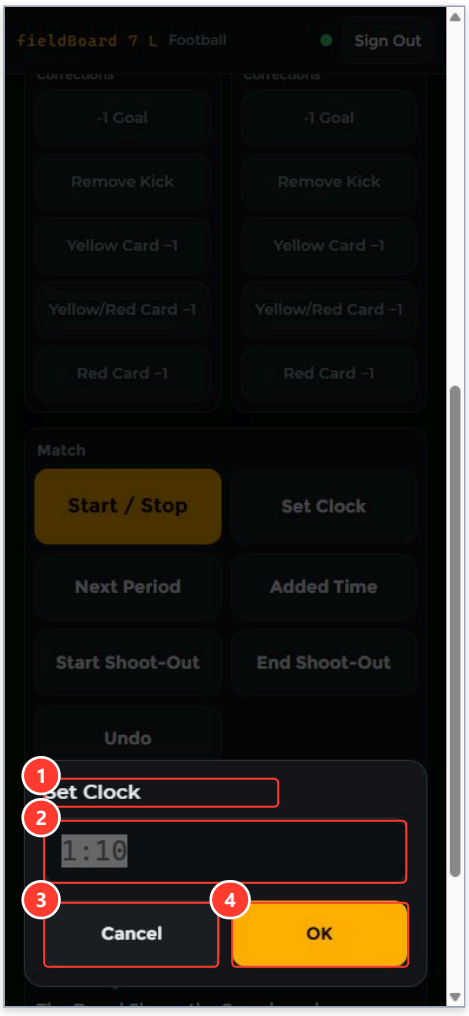


Figure 98. An input sheet (Set Clock) on a phone

#	Control	What it does
1	**Title**	The action, with the team where it belongs to one.
2	**Input**	Type the value (Set Clock: *m:ss*, the current time is filled in and selected). The phone shows its number keyboard. Where the value has a format of its own, the sheet shows an *Example:* … line above the box.
3	**Cancel**	Closes the sheet without a change (so does a tap outside the sheet).
4	**OK**	Sends the value (also `Enter`).

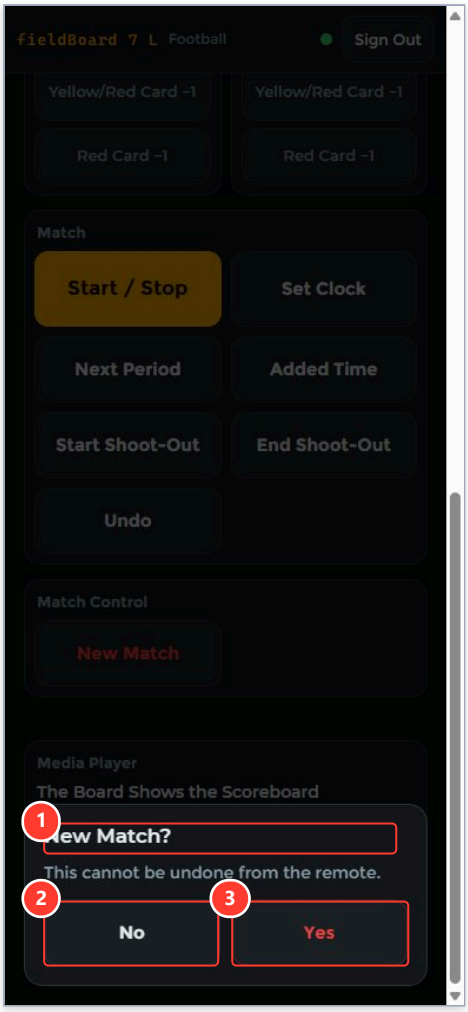


Figure 99. The confirm sheet of a Match Control action on a phone

#	Control	What it does
1	**Question**	The action with a question mark, and “This cannot be undone from the remote.”
2	**No**	Nothing happens.
3	**Yes**	Runs the action (red: it resets or ends something).

15 Data Exchange

fieldBoard 7 L offers three data channels for other software and devices. They are the same in every scoreboard product of the family and are described for developers in the separate integration API document.

Channel	Default	Switch	Use it for
HTTP API	TCP 1907	Settings → Remote Control (on by default)	Scripts, web pages, graphics systems that poll the state (vMix data source, CasparCG templates) and send commands. Needs the PIN.
Console link	TCP 1908	Settings → Console Integration → Console (TCP)	Table consoles and statistics software: one connection for many commands and the live state. Same PIN and the same lockout as the remote.
UDP broadcast	UDP 1909	Settings → Console Integration → UDP Broadcast, or UDP on the right strip	LED controllers and displays that only listen: every change is sent as JSON to the local network, no sign-in.

All channels use the same commands as the panel (for example *score.add*, *clock.toggle*, *timeout.take*) and the same data keys as the board designs (for example *home.score*, *clock.text*, *period.name*, *home.fouls*). The list of actions and keys of the running discipline is available from the HTTP API (*/api/catalog*).

> **Note** Commands only change the score with a POST request; a plain web link can never change the board. Allow TCP 1907 / 1908 in the Windows firewall of the scoreboard PC when other devices connect. UDP broadcast does not cross routers.

16 Typical Workflows

1. Connect the second display and set it to *Extend* in the Windows display settings (`Win` + `P`), Scale 100 %.
2. Start fieldBoard 7 L, click the sport button in the bottom bar and choose the sport and discipline.
3. Open **Teams**: type the event, team names, short names, choose colours and logos, fill the team lists and click **Apply**.
4. Open **Outputs**: in the Standard (LED) row choose monitor 2, tick **Full Screen** and **Show** (for a sender card: Full Screen off and the LED's pixel area, see *Sending the Board to the LED Screen*).
5. Click the design icon on the output strip and pick the master design you like for St.
6. Optionally switch on the background video with the icon at the bottom right.
7. Go back to **Game** and run the match; use the St on-air row for Intro before the start and Result at the end.

1. Connect the sender card, press `Win` + `P` → **Extend**, and set the card's monitor to 1920 × 1080, Scale 100 %, in the Windows display settings.
2. Let the LED supplier map the screen in the vendor software from the top left corner (0, 0) of the card's input.
3. On **Outputs**, Standard (LED): choose the sender card's monitor, untick **Full Screen**, type Left 0, Top 0, Width 384, Height 192 and tick **Show**.
4. Check the LED: the board fills it exactly. Close fieldBoard 7 L.
5. On match day just start fieldBoard 7 L: the board opens on the LED by itself.

1. Before the match open **Media Player**, click **Add Clip** and choose the video and the two pictures; drag the rows into order.
2. Switch **Return to the Scoreboard** on (green frame), set the sound on if the video has music, and check **Image Play Duration** on the Settings page.
3. At half-time select the first row and click **Start**: the clips play one after the other on the board.
4. At the end of the playlist the scoreboard comes back by itself (or click **Finish** / the **Game** tab earlier).

1. Open **Settings** and note the address and the PIN of the Remote Control row (set your own PIN and click Apply if you like).
2. Connect the phone to the same Wi-Fi and open the address in its browser.
3. Enter the PIN and press ✓.
4. Use the team buttons for scores, fouls and timeouts and the Match buttons for the clock; mistakes are fixed with the Corrections buttons or Undo.
5. Keep the PC operator for info graphics and screens; both can work at the same time.

1. Before the day, open **Teams** and type the event name and the venue.
2. Type the first match's teams with their team lists (number, name, Show) and click **Apply**.
3. For each later match, change names, short names, colours, logos and team lists and click **Apply**, then click **New Match** (the team setup is kept, the score is reset).
4. Untick **Show** for injured or absent players instead of deleting them.
5. Before each match, show the Intro screen and the team lists (Info page → Team Lists, with **Slide** for a player-by-player presentation).

1. Type only the team names and click **Apply** on the Teams page.
2. Score on the Game page as usual (team scores without players).

3. For a goal or a card graphic, open the Info page, choose the team and type just the number (or number and name) into the player field.
4. Click **Show**. A number with a name is added to the team list, so it can be picked from ▾ next time.

1. Start the PC and fieldBoard 7 L again.
2. Answer **Yes** to *"The program did not close normally. Restore the last match?"*.
3. Check score, fouls and penalties on the Game page; the clock is stopped at the time of the last recorded action.
4. Ask the table officials for the official time and correct it with **Set Clock**.
5. Check that the board is open (it opens again by itself at its place) and start the clock with the referee's signal.

1. Click the design icon on the output strip, then **Edit** on the Arena card.
2. Click **Save a Copy** and give the design the club name.
3. Open the **Theme** tab and change the colour tokens (accent, panel, text) and the fonts – every screen of the design follows.
4. Check the special moments with **Preview Data** and the shapes of your screens with **Preview Size**.
5. Click **Save** (`Ctrl` + `S`), close the editor and choose the new design (★) for St on the Outputs page or in the gallery.

17 Football (Soccer)

The **Football** preset follows the classic football scoreboard: two halves of 45 minutes on a count-up clock, added time after each half, two periods of extra time and a penalty shoot-out.

Rule	As implemented
Periods	First Half (1H) and Second Half (2H), 45:00 each. The clock counts up and continues across the halves: the second half starts at 45:00 and runs to 90:00.
End of a half	The clock holds at 45:00 / 90:00 and the time played after it counts on as added time ("+1:24"); the referee ends the half – you click the next period button.
Extra time	ET1 and ET2 (buttons **Extra Time - 1** / **Extra Time - 2**), 15:00 each (the clock continues at 90:00 → 105:00 → 120:00), at most two.
Shoot-out	**Shoot-Out** button (PEN on the boards): best of 5 kicks per team, then sudden death in pairs. The board shows the last five marks per team; once one team cannot be caught, further kicks are refused.
Score	Goal = 1.
Cards	Yellow Card (Y), Yellow/Red Card (Y/R, the second yellow) and Red Card (R) are counted per team and per player; football has no timed sin bin.
Timeouts	None.

The Game Panel

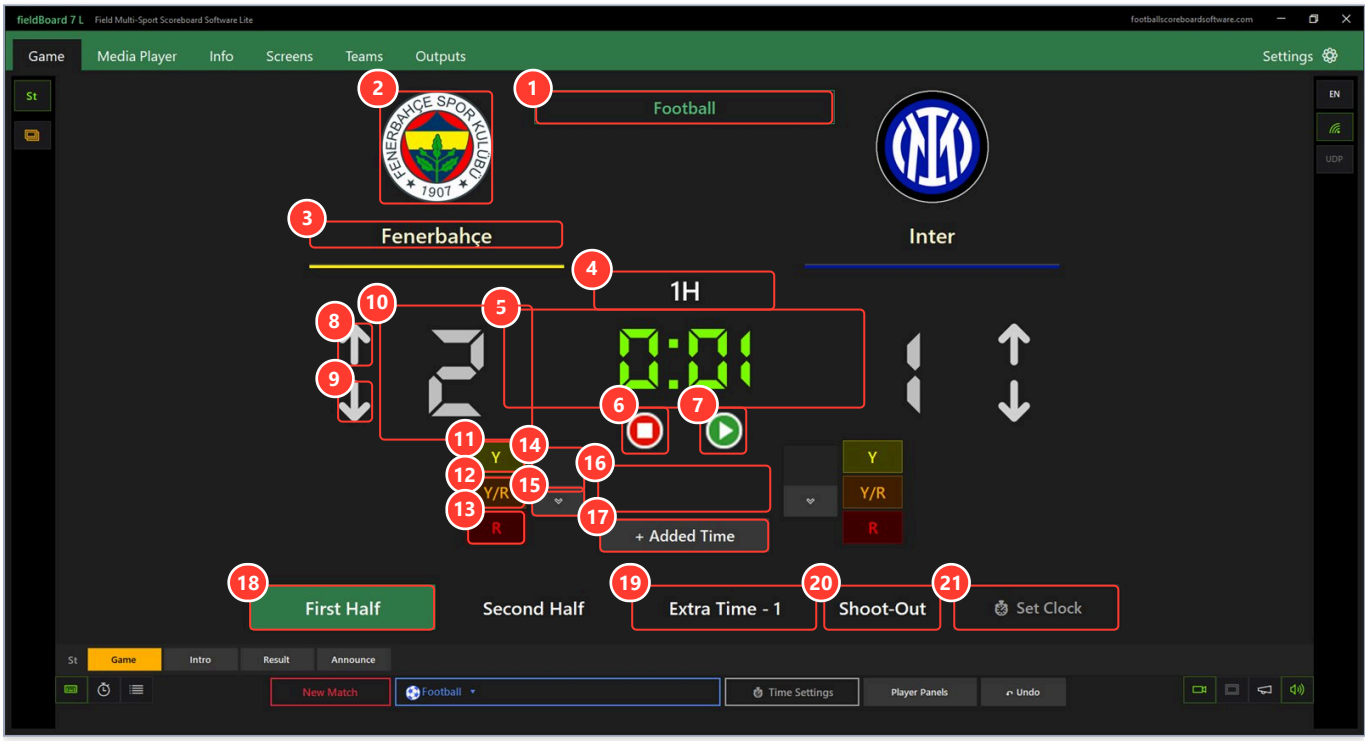


Figure 100. The Game page with the Football preset

#	Control	What it does
1	**Discipline Button**	Shows the running rule preset. Click it to open the sport picker and change the sport or the discipline (the sport button in the bottom bar does the same). See Choosing the Sport and Discipline.

#	Control	What it does
2	**Team Logo (Home)**	The home team's logo, or its short name in the team colour when there is no logo. Logos are set on the Teams page; the guest logo sits on the right.
3	**Team Name Box (Home)**	Type a new name and press `Enter` (or click elsewhere) to save it to the team setup; the boards follow at once. The coloured line under the name is the team colour from the Teams page.
4	**Period Name**	The running period (1H, 2H, ET1, ET2, PEN) as the boards show it.
5	**Game Clock**	The game clock. It is white when stopped and lit while it runs. **Double-click** it to type the time (m:ss or m:ss.t), the same as Set Clock.
6	**Stop**	Stops the game clock (`F1` toggles start / stop).
7	**Start**	Starts the game clock. In a sport without added time it refuses to start when the period has run out (go to the next period first); during a shoot-out the clock cannot be started.
8	**↑ Goal (Home)**	Adds a goal for the home team, credited to the player in the number box if there is one (`Num 7`; guest `Num 9`). The guest arrows are on the right.
9	**↓ Remove Goal (Home)**	Takes a goal of the team back (`Num 0`; guest `Num ,`).
10	**Score (Home)**	The team's goals. It changes only with the arrows or Undo.
11	**Y – Yellow Card (Home)**	Counts a yellow card for the team (and for the player in the number box). **Right-click** takes one yellow card of the team back.
12	**Y/R – Yellow/Red Card (Home)**	Counts a yellow/red card (the second yellow). Right-click takes one back. Hover a card button to see its full name.
13	**R – Red Card (Home)**	Counts a red card; the boards show the red cards of each team. Right-click takes one back.
14	**Player Number Box (Home)**	Type a shirt number (up to three letters or digits) before you press a card or score button: the action is credited to that player and the box clears. Leave it empty for a team-only entry.
15	**Player List ▾ (Home)**	Opens the team list (number and name) from the Teams page; pick a player to fill the number box, or **—** to clear it. **Other Player...** asks for "number name" (see the player list below).
16	**Added Time Display**	Red, under the clock: the announced added time ("+3") and, once the clock holds at 45:00 or 90:00, the time played on ("+1:24 (+3)"). During the shoot-out it shows "PEN 4 – 3".
17	**+ Added Time**	Asks for the announced added time in minutes (empty or 0 = none). The board shows it as "+3"; once the clock has reached the end of the period it shows the time played on, e.g. "+1:24 (+3)".
18	**First Half / Second Half**	Go to that half: the clock is set to its start (0:00 or 45:00) and stops, the added time is cleared. The running period is green.
19	**Extra Time - 1 / Extra Time - 2**	Starts the first period of extra time (clock at 90:00; the boards show ET1). While extra time runs the button shows the running period; click it again for **Extra Time - 2**.
20	**Shoot-Out**	Starts the penalty shoot-out (tool tip *Penalty Shoot-Out*): the game clock stops and a row with ● **Shoot-Out Goal** / ○ **Shoot-Out Miss** buttons and the marks of each team appears at the top of the panel. The button is lit while the shoot-out runs; click it again to end the shoot-out.

#	Control	What it does
21	**Set Clock**	Asks for the time on the clock (m:ss or m:ss.t). Type the time as it is shown, e.g. *62:30* in the second half of a count-up clock. Setting the clock also clears the added time already played.

> **Tip** The guest side is the mirror image of the home side: arrows on the far right, cards and number box right of the clock. Rails, the St row and the bottom bar are explained in The Main Window.

Player Number and Player List

Scores and cards can be credited to a player. Type the shirt number in the team's number box, or click the ▾ under it:



Figure 101. The player list under the home number box (Football)

#	Control	What it does
1	—	Clears the number box: the next card or score counts for the team only.
2	**Players (Number · Name)**	The team list of the Teams page, sorted by number; the ticked one is the number in the box. Click a player to put the number into the box – it is used by the next score or card button of that team and then cleared.
3	**Other Player...**	Opens the Other Player dialog below: type a number and a name for a player who is not in the list.

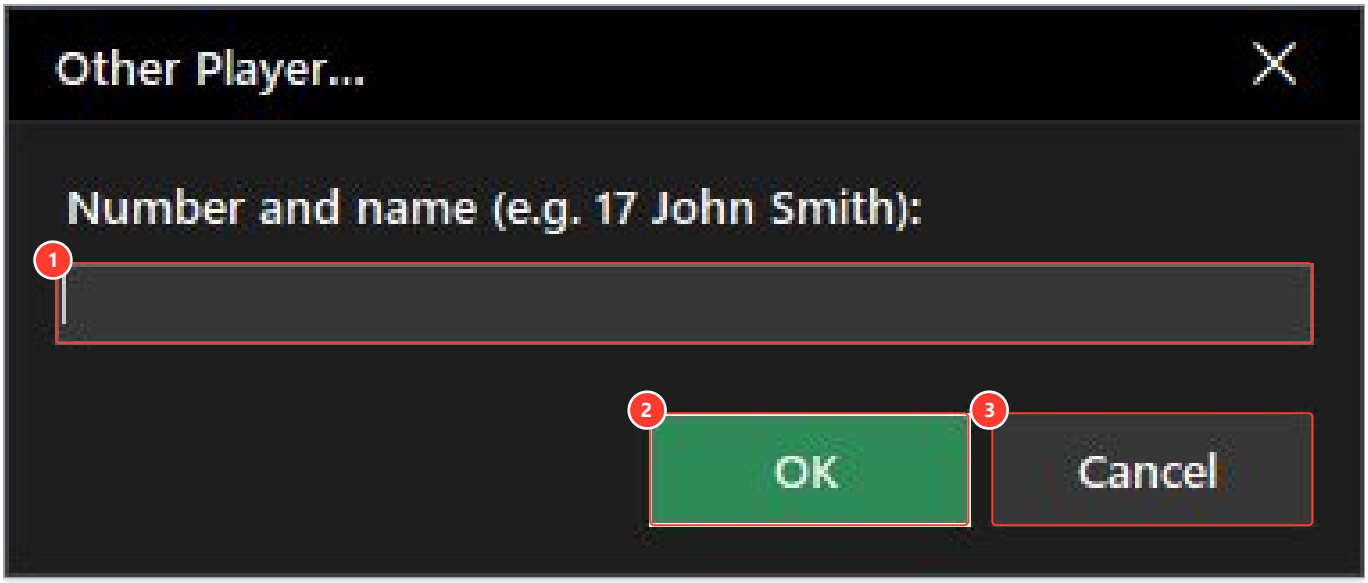


Figure 102. Other Player...

#	Control	What it does
1	**Number and Name**	Type the shirt number, optionally followed by the name: *17 John Smith*, *17 - John Smith*, *#17* or just *17*. Without a number nothing happens.
2	**OK**	Puts the number into the number box; a player with a name that is not in the team list yet is added to it (and appears in later menus and team lists). `Enter` does the same.
3	**Cancel**	Closes the dialog and changes nothing (also `Esc` or the × in the title bar).

Tip The number box clears after each credited action, so a wrong number never sticks to the next entry. Players added with Other Player... are saved in the team list of Football.

Dialogs of the Panel

The panel opens these dialogs. Each one is modal: finish it with OK / Save or close it with Cancel (`Esc`).

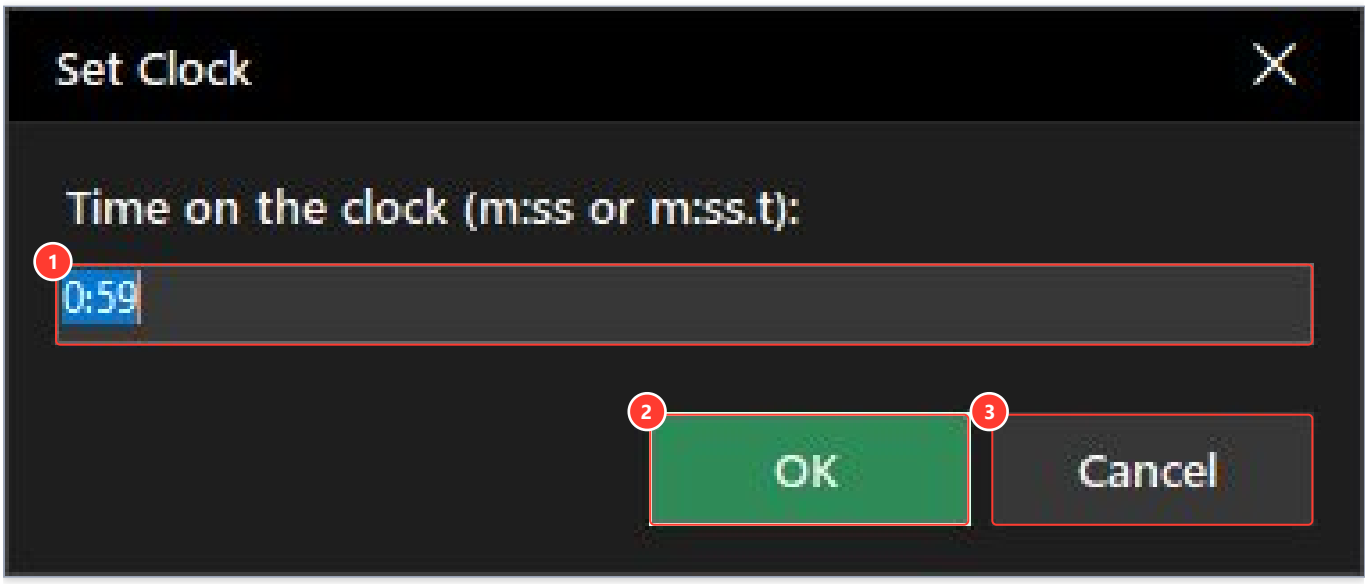


Figure 103. Set Clock (also: double-click the game clock)

#	Control	What it does
1	**Time on the Clock**	Type the time as the clock should show it (m:ss or m:ss.t; plain seconds work too). In the second half type the running time, e.g. *62:30*.
2	**OK**	Sets the clock; a time outside the running period is refused. `Enter` does the same.
3	**Cancel**	Closes the dialog and changes nothing (also `Esc` or the × in the title bar).

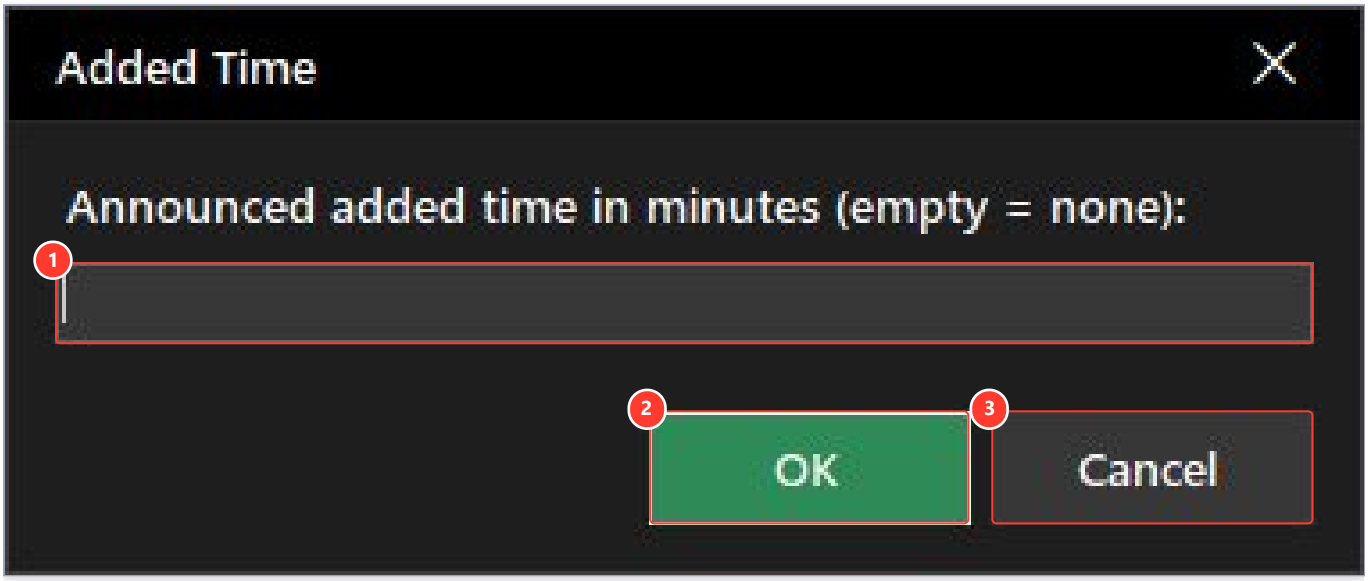


Figure 104. Added Time

#	Control	What it does
1	**Minutes**	The added time the officials announce, in whole minutes (0–99, "+3" is accepted). Empty or 0 removes the announcement.
2	**OK**	Shows "+N" next to the clock and on the boards; going to another period clears it. `Enter` does the same.
3	**Cancel**	Closes the dialog and changes nothing (also `Esc` or the × in the title bar).

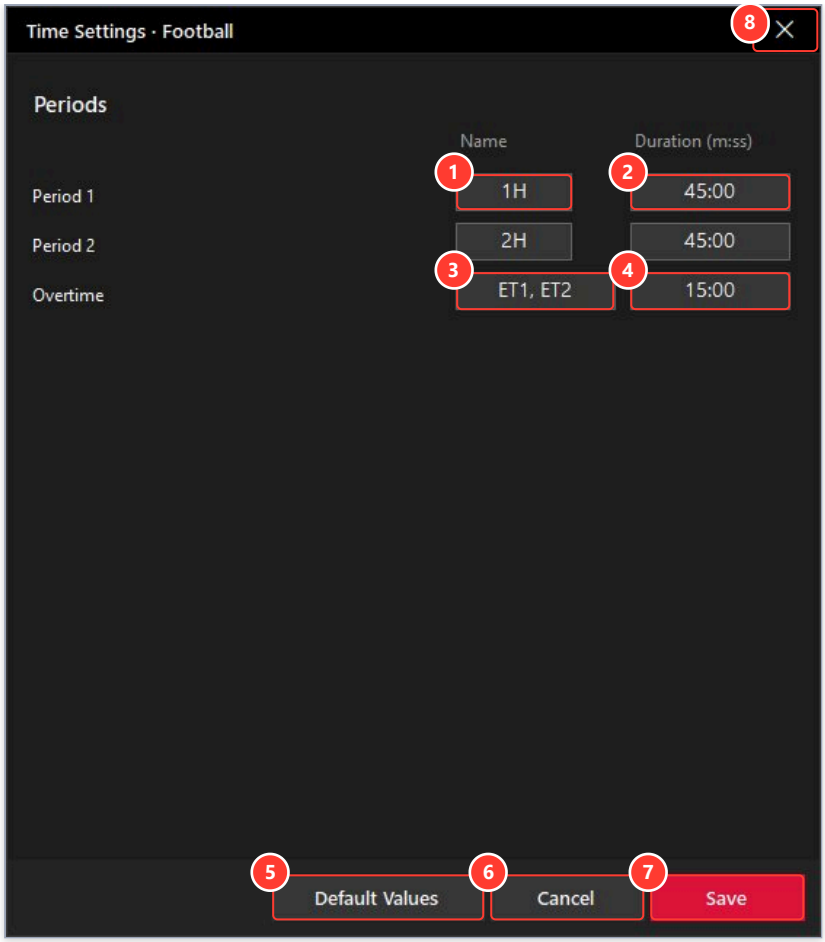


Figure 105. Time Settings · Football

#	Control	What it does
1	**Period Names**	The short names of the halves as the boards show them (1H, 2H). Change them e.g. to H1 / H2.
2	**Period Durations**	Length of each half in m:ss. For youth football type e.g. 30:00 or 25:00; the halves may also have different lengths.
3	**Extra-Time Names**	The names of the extra-time periods as the period button and the boards show them (ET1, ET2), separated by commas.
4	**Extra-Time Duration**	Length of each extra-time period (15:00).
5	**Default Values**	Puts the factory times of the discipline back into the fields after a confirmation. Nothing is saved until you click Save.
6	**Cancel**	Closes the dialog without saving; when you changed a field it asks first whether to discard the changes.
7	**Save**	Checks and saves the times for this discipline (an invalid value is reported in red and nothing is saved). If a match is in progress you are asked whether to start a new match with the new times now.
8	**Close (×)**	The same as Cancel.

Only values that differ from the factory times are stored, per discipline, so a youth setting for Football stays when you switch to rugby and back. The Time Settings button shows a ***** while the times differ from the factory values.

Sport picker. The discipline button above the clock and the sport button in the bottom bar open the sport picker (shown for every sport in Choosing the Sport and Discipline). The disciplines of this sport: **Football** – The only football preset; clicking it while it runs changes nothing. A running match asks before it switches.

Keyboard shortcuts. The keyboard icon at the bottom left of the Game page opens the shortcut editor with the actions of Football (its picture is in Keyboard Shortcuts). The default keys of this sport:

Key	Default action in this sport
`F1`	Start / Stop the game clock
`F2`	Next Period
`F12`	Undo
`Num 7` / `Num 9`	+1 Goal home / guest
`Num 0` / `Num ,`	Take back Goal home / guest
`Num 2`	Horn

Info Page and Screens

The Info, Screens and Teams pages of every sport are shown in The Info Page, The Screens Page and Teams and Players. With Football the Info page has these rows: **Announce**, **Goal**, **Cards** (Yellow Card, Yellow/Red Card or Red Card), **Red Card** (dots that set 0–4 red cards per team), **Player Intro**, **Substitution**, **Multiple Substitution**, **Team Lists**, **Officials**, **Info Screens** (Intro, Result and Announce).

The Screens page lists the St screens of Football – Game, Intro, Result, Announce, Goal, Card, Substitution, Substitutions, Player Intro, Team List and Officials. Its Player Panels columns for Football are No, Name, Points, Cards.

> **Tip** Scoring on the Game page does not put a graphic on air by itself – use the Goal, Cards and Substitution rows of the Info page for that, so the operator decides what the spectators see.

Outputs of Football

The board of Football (see Outputs and Sending the Board to the LED Screen for the monitor and the area):

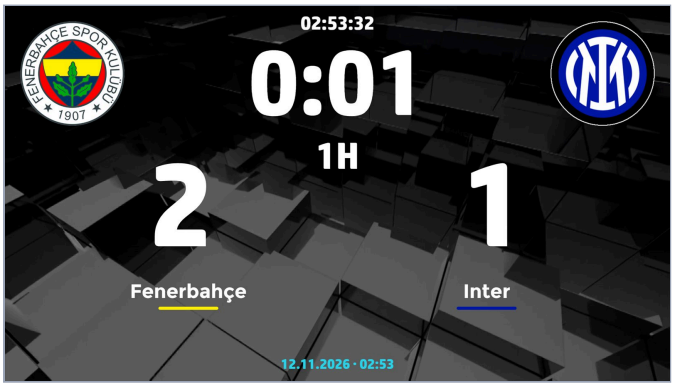


Figure 106. St – Standard (LED) board: logos, names with the team colour, score, clock, period, the time of day and the date; the red cards appear only once a team has one



Figure 107. St with Player Panels (Player Panels in the bottom bar of the Game page): both team lists with the goals of each player around the score

The other St screens. Event graphics (goal, card, substitution, team list, officials) go back to the game board after the **Seconds on Air** set on the Info page; Intro, Result, Announce stay until you click **Game** in the St row.



Figure 108. Intro – both teams with logos, the event name, the venue and the date; click Intro in the St row of the Game page before the match.

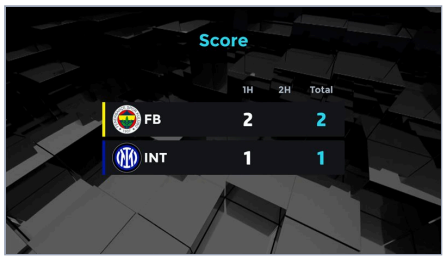


Figure 109. Result – the score of each period and the total; click Result in the St row at half-time and after the final whistle.

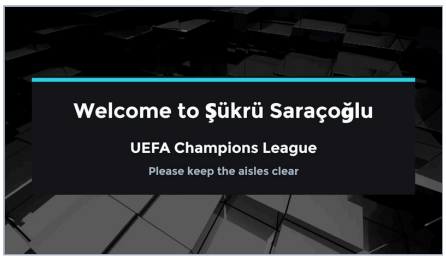


Figure 110. Announce – the title and three lines from the Info page or the Screens page; Show on the Announce row (or Announce in the St row).



Figure 111. Goal – the scorer's number, name, photo and team with the new score; Show on the Goal row of the Info page.

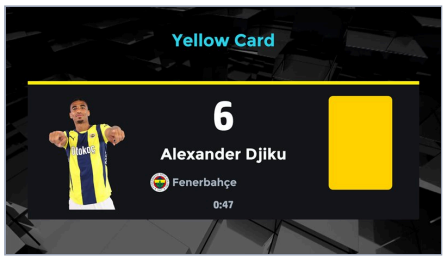


Figure 112. Card – player, team, minute and the card; Show on the Cards row of the Info page.

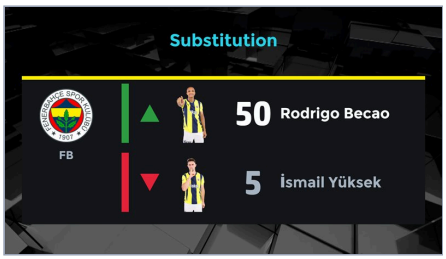


Figure 113. Substitution – player in (▲) and out (▼); Show on the Substitution row of the Info page.

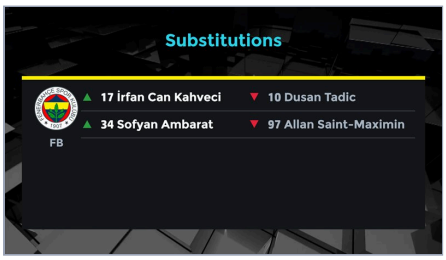


Figure 114. Substitutions – up to five pairs of one team; Show on the Multiple Substitution row.

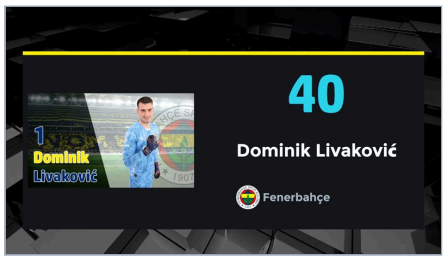


Figure 115. Player Intro – one player on the whole board; Player Intro row, or Slide on the Team Lists row.



Figure 116. Team List – the players marked Show with numbers and the coach; a team button on the Team Lists row.

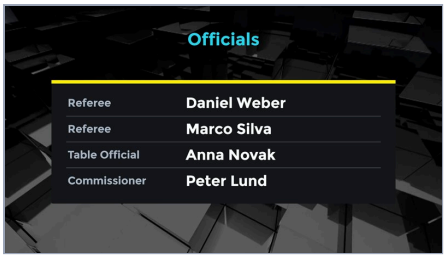


Figure 117. Officials – up to four roles and names; Show on the Officials row.

Remote Control for Football

The remote page builds itself from the actions of the running discipline (see Remote Control for connecting a phone or tablet). For Football it looks like this:

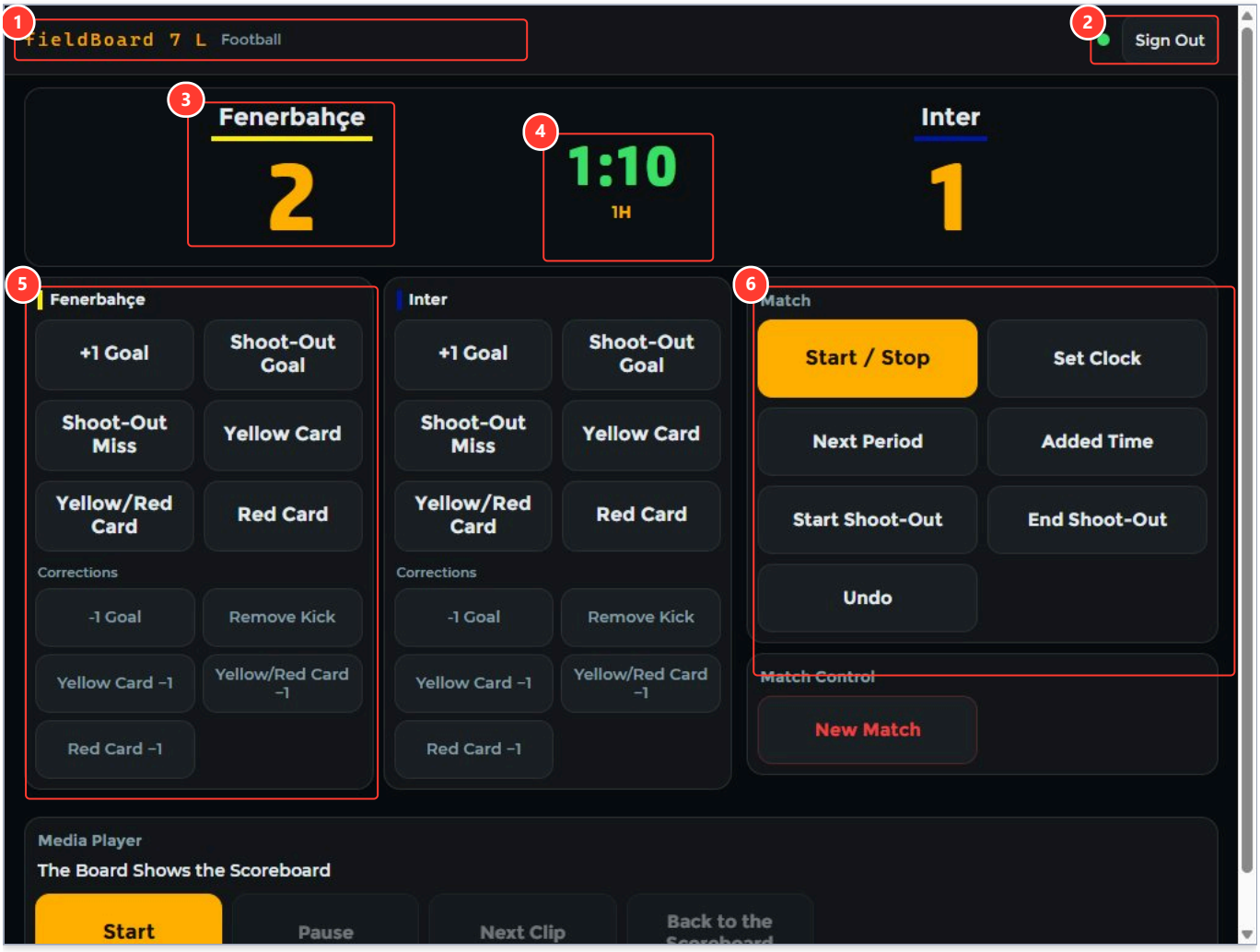


Figure 118. The remote on a tablet (Football)

#	Control	What it does
1	**Product Name · Sport**	The program name (fieldBoard 7 L) and the running sport or discipline (the discipline alone when its name already contains the sport, e.g. *Rugby Union*). When the operator changes the sport or starts a new match on the PC, the page rebuilds its buttons by itself. The texts of the page follow the language of the program.
2	**Connection Dot / Sign Out**	Green = connected to the scoreboard. **Sign Out** ends the session after a confirmation.

#	Control	What it does
3	**Team Name and Score**	Name (underlined in the team colour; a long name takes two lines) and score of each team, updated several times a second.
4	**Clock and Period**	The game clock (green while it runs) and the period.
5	**Team Section (Home)**	The actions of one team as large buttons (scores, shoot-out kicks and cards); the guest section is next to it. Below them, the **Corrections** take the last entry of a type back. A score button shows its value once (*+1 Goal*, *-1 Goal*); long captions wrap at a word.
6	**Match Section**	Actions that belong to the match: Start / Stop, Set Clock, Next Period, Added Time, Start Shoot-Out / End Shoot-Out, Undo. **Start / Stop** is the large amber button.

Section	Button	What it does
Team (once per team)	+1 Goal	A goal for the team (for the team only – the remote has no player number).
	Shoot-Out Goal / Shoot-Out Miss	A kick of the shoot-out (start it first with Start Shoot-Out).
	Yellow Card	Counts a yellow card.
	Yellow/Red Card	Counts a yellow/red card (the second yellow).
	Red Card	Counts a red card.
Corrections (per team)	-1 Goal	Takes a goal back.
	Remove Kick	Removes the team's last shoot-out mark.
	Yellow Card −1 / Yellow/Red Card −1 / Red Card −1	Takes one card of that kind back.
Match	Start / Stop	Starts or stops the game clock.
	Set Clock	Opens a sheet with the clock time; type the new time.
	Next Period	Goes to the next half or extra-time period (clock set and stopped).
	Added Time	Asks for the announced minutes.
	Start Shoot-Out / End Shoot-Out	The same as the Shoot-Out button on the panel.
	Undo	Takes the last action back, whoever made it.
Match Control	New Match	Asks "New Match? This cannot be undone from the remote." – **Yes** resets the match like New Match on the PC.

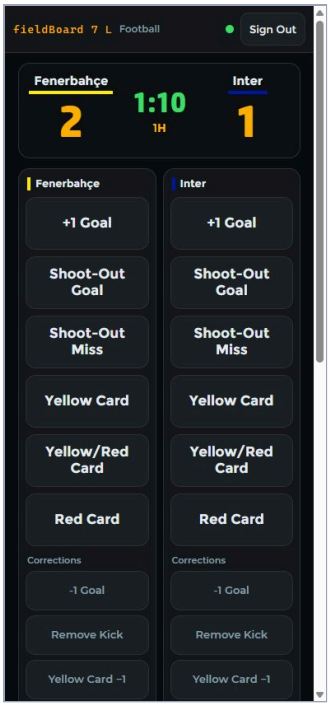


Figure 119. Phone: score bar and the team sections (two columns)

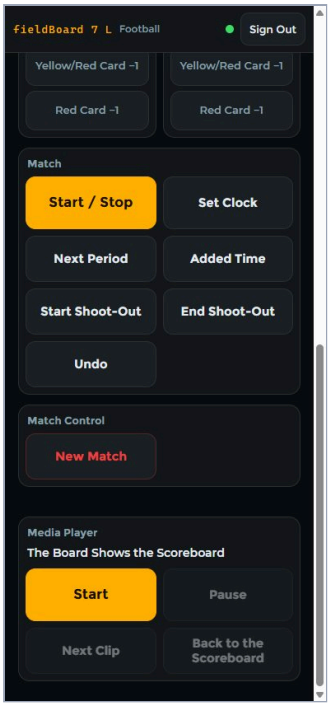


Figure 120. Phone, scrolled down: Corrections, Match and Match Control

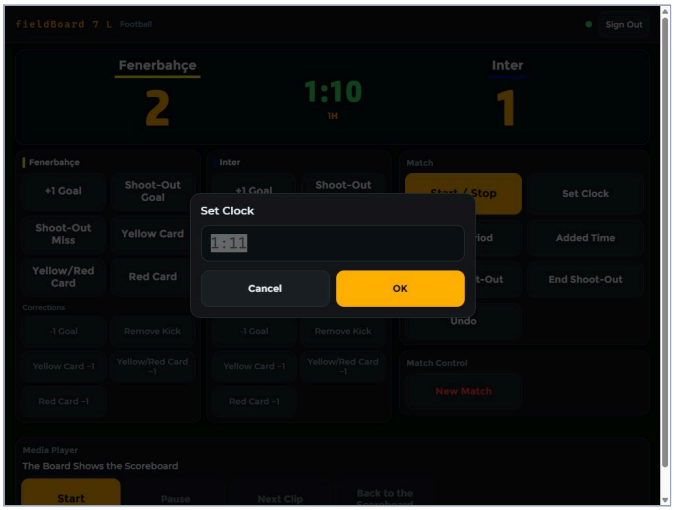


Figure 121. Tablet: the value sheet of Set Clock – type the time and tap OK, or Cancel

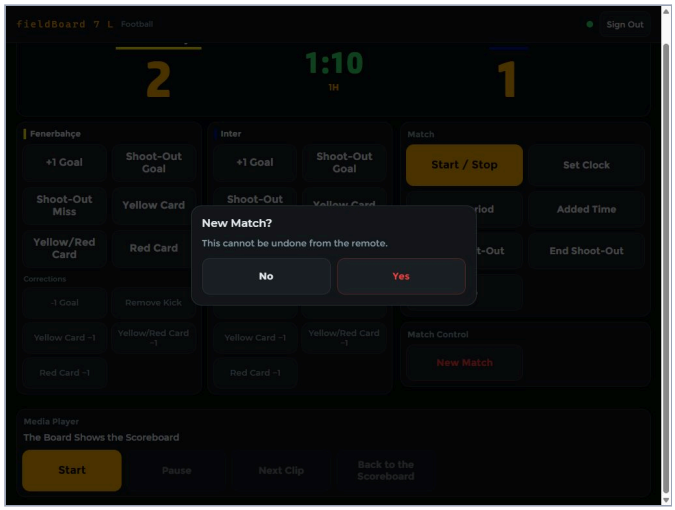


Figure 122. Tablet: actions that reset the match ask first

Scenarios

1. At 44:10 the fourth official shows three minutes: click **+ Added Time**, type *3* and click OK. The board shows "+3".
2. At 45:00 the clock holds and the board shows the time played on, e.g. "+0:40 (+3)". When the referee blows, click **Stop**, then **Second Half** (the clock jumps to 45:00).
3. Repeat for the second half. At full time with the score level, click **Extra Time - 1**; at the end of ET1 click the same button again for Extra Time - 2.
4. After extra time click **Shoot-Out**. The clock stops and the shoot-out row appears at the top of the panel.
5. For each kick click ● **Shoot-Out Goal** or ○ **Shoot-Out Miss** of the kicking team. The board shows the marks and "PEN 4 – 3".
6. When one team can no longer be caught after five kicks (or after a sudden-death pair), the shoot-out is decided and further kicks are refused. A wrong mark is taken back with ↶ **Undo** (or Remove Kick on the remote).

7. Click **Shoot-Out** again to end the shoot-out, then put the **Result** screen on air.

1. Number 9 scores: click ▾ under the home number box, choose 9, then click the home ↑. The score changes and player 9 gets the goal on the player panels.
2. Open the **Info** page. Keep **St** ticked in Show On and leave Seconds on Air at 10.
3. On the Goal row click the home team button, choose number 9 from the player box and click **Show With Picture**.
4. St shows the Goal screen with the photo and the new score. After 10 seconds both go back to the game board by themselves.
5. A yellow card: Game page – type the number and click **Y**; then on the Info page Cards row choose the player and **Yellow Card** and click **Show**.

1. Connect the phone as described in Remote Control and sign in.
2. The phone operator taps **Yellow Card**, **Yellow/Red Card** or **Red Card** in the team's column; the PC panel and the boards follow at once.
3. A wrong card is taken back with the matching **… −1** button under Corrections.
4. The PC operator keeps the clock and credits goals to players with the number box, which the remote does not have.

18 Rugby

Rugby has four presets. All of them use a count-up clock that holds at the end of each half while the added time counts on – the referee decides when the half ends.

Preset	Periods	Extra time	Scores	Cards	Extras
Rugby Union	2 × 40:00 (P1, P2), continuous 0–80	E1, E2, 10:00 each	Try 5, Conversion 2, Penalty Goal 3, Drop Goal 3, Penalty Try 7	Yellow 10 min, 20-minute red 20 min, Red	Kicking competition (**Kicking** button, KC on the boards)
Rugby League	2 × 40:00	E1, E2, 5:00 each, golden point (the first score in extra time ends the match)	Try 4, Conversion 2, Penalty Goal 2, Field Goal 1, 2-Point Field Goal 2	Yellow 10 min, Red	Tackle count 0–6, possession
Rugby Sevens	2 × 7:00	E1, E2, 5:00 each, sudden death	as Union	Yellow 2 min, Red	–
Touch / Tag Rugby	2 × 20:00, each half from 0:00	none	Touchdown 1	Yellow 2 min, Red	Touch count 0–6, possession

On the Rugby League panel the 2-Point Field Goal buttons are captioned **FG2** (Field Goal 1 is **FG1**). Touch / Tag Rugby has one score type, so its panel uses the ↑ / ↓ arrows of the football panel.

A timed card (the yellow card, the 20-minute red) starts a sin-bin timer for the player that runs only while the game clock runs. Up to three timers per team are shown in the panel and on the boards; a timer ends by itself or with its ✕ button. A plain red card has no timer and is counted.

The Game Panel

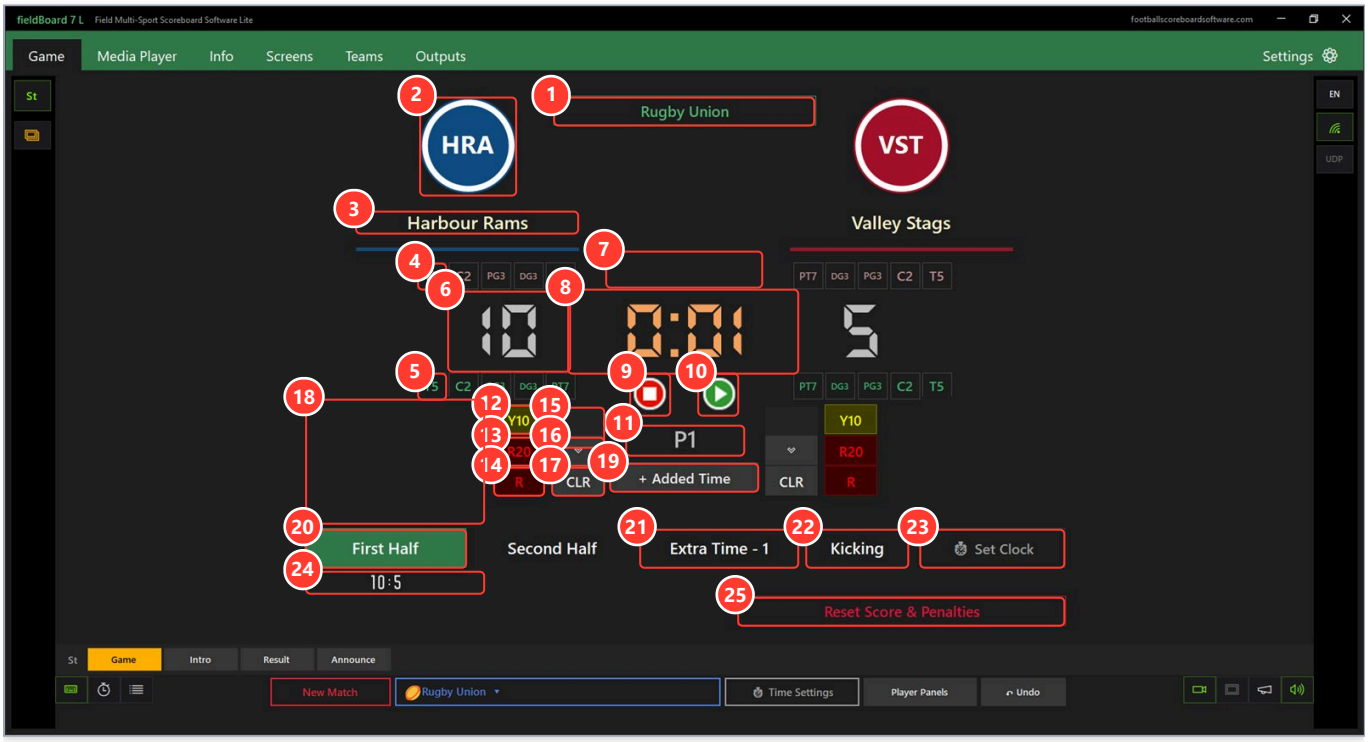


Figure 123. The Game page with the Rugby Union preset

#	Control	What it does
1	**Discipline Button**	Shows the running rule preset. Click it to open the sport picker and change the sport or the discipline (the sport button in the bottom bar does the same). See Choosing the Sport and Discipline.
2	**Team Logo (Home)**	The home team's logo, or its short name in the team colour when there is no logo. Logos are set on the Teams page; the guest logo sits on the right.
3	**Team Name Box (Home)**	Type a new name and press `Enter` (or click elsewhere) to save it to the team setup; the boards follow at once. The coloured line under the name is the team colour from the Teams page.
4	**Score Buttons, Top Row (Home)**	Take one score of that type back (− T5 Try, C2 Conversion, PG3 Penalty Goal, DG3 Drop Goal, PT7 Penalty Try). The button is refused when the team has no such score.
5	**Score Buttons, Bottom Row (Home)**	Add one score of that type (+ T5 Try, C2 Conversion, PG3 Penalty Goal, DG3 Drop Goal, PT7 Penalty Try); the number in the caption is its value. With a number in the player box the points are credited to that player. The guest buttons on the right are mirrored.
6	**Score (Home)**	The team total, made of all score types. It changes only through the score buttons (or Undo).
7	**Added Time Display**	Red, above the clock: the announced added time ("+3") and, once the clock holds at the end of the period, the time played on.
8	**Game Clock**	The game clock. It is white when stopped and lit while it runs. **Double-click** it to type the time (m:ss or m:ss.t), the same as Set Clock.
9	**Stop**	Stops the game clock (`F1` toggles start / stop).
10	**Start**	Starts the game clock. In a sport without added time it refuses to start when the period has run out (go to the next period first); during a shoot-out the clock cannot be started.
11	**Period Name**	The name of the running period (P1, P2, E1 …) as the boards show it.
12	**Y10 – Yellow Card (Home)**	Sends the player in the number box to the sin bin for 10 minutes: a timer row starts left of the card buttons and on the board. Without a number the timer runs for the team.
13	**R20 – 20-Minute Red Card (Home)**	Starts a 20-minute timer (the player is replaced after 20 minutes).
14	**R – Red Card (Home)**	Counts a red card for the team and the player (no timer). **Right-click** takes one red card back.
15	**Player Number Box (Home)**	Type a shirt number (up to three letters or digits) before you press a card or score button: the action is credited to that player and the box clears. Leave it empty for a team-only entry.
16	**Player List ▾ (Home)**	Opens the team list (number and name) from the Teams page; pick a player to fill the number box, or **—** to clear it. **Other Player…** asks for "number name" (see the player list below).
17	**CLR (Home)**	Clears the player number box without doing anything else.
18	**Running Sin Bins (Home)**	Up to three running timed cards of the team: shirt number, time left and a red ✕. Click ✕ to remove exactly the card of that row early (e.g. a wrongly entered card). The rows appear only while a card is running; the board shows them as the team's sin bin.

#	Control	What it does
19	**+ Added Time**	Asks for the announced added time in minutes (empty or 0 = none). The board shows it as "+3"; once the clock has reached the end of the period it shows the time played on, e.g. "+1:24 (+3)".
20	**First Half / Second Half**	Go to that half: the clock is set to 0:00 or 40:00 and stops; added time and the announced minutes are cleared.
21	**Extra Time - 1 / Extra Time - 2**	Starts extra time at 80:00 (E1 on the boards). While extra time runs, the button shows the running period; click it again for **Extra Time - 2**.
22	**Kicking (Kicking Competition)**	Starts the kicking competition (tool tip *Kicking Competition*; best of 5 per team, then sudden death, KC on the boards). The clock stops and the Goal / Miss buttons appear at the top of the panel; the button is lit while it runs – click it again to end it.
23	**Set Clock**	Asks for the time on the clock (m:ss or m:ss.t). Type the time as it is shown, e.g. *62:30* in the second half of a count-up clock. Setting the clock also clears the added time already played.
24	**Period Scores**	The score of each regular period under its button ("10 : 5"), filled in as the periods are played.
25	**Reset Score & Penalties**	After a confirmation, starts the match afresh: scores, period scores, cards, sin bins, shoot-out and clock go back to the start of the first period. Team names and lists stay.

> **Note** Score buttons: the **top row takes a score back** , the **bottom row adds it** (hover a button to see "– Try" or "+ Try"). The guest buttons are mirrored, the try button is always nearest the edge of the panel. The game clock is orange while it runs.

In **Rugby League** and **Touch / Tag Rugby** a row above the panel adds **Tackle +1**, the tackle count, **Tackle -1** and **Tackles 0**, and two **Possession** buttons appear at the outer edges of the panel (the team that has the ball is lit). Giving the other team possession starts a new set of tackles (the count goes back to 0); the board shows "Tackle 4" while counting. The count stops at the last tackle (6); `F11` changes possession.

Player Number and Player List

Scores and cards can be credited to a player. Type the shirt number in the team's number box, or click the ▾ under it:

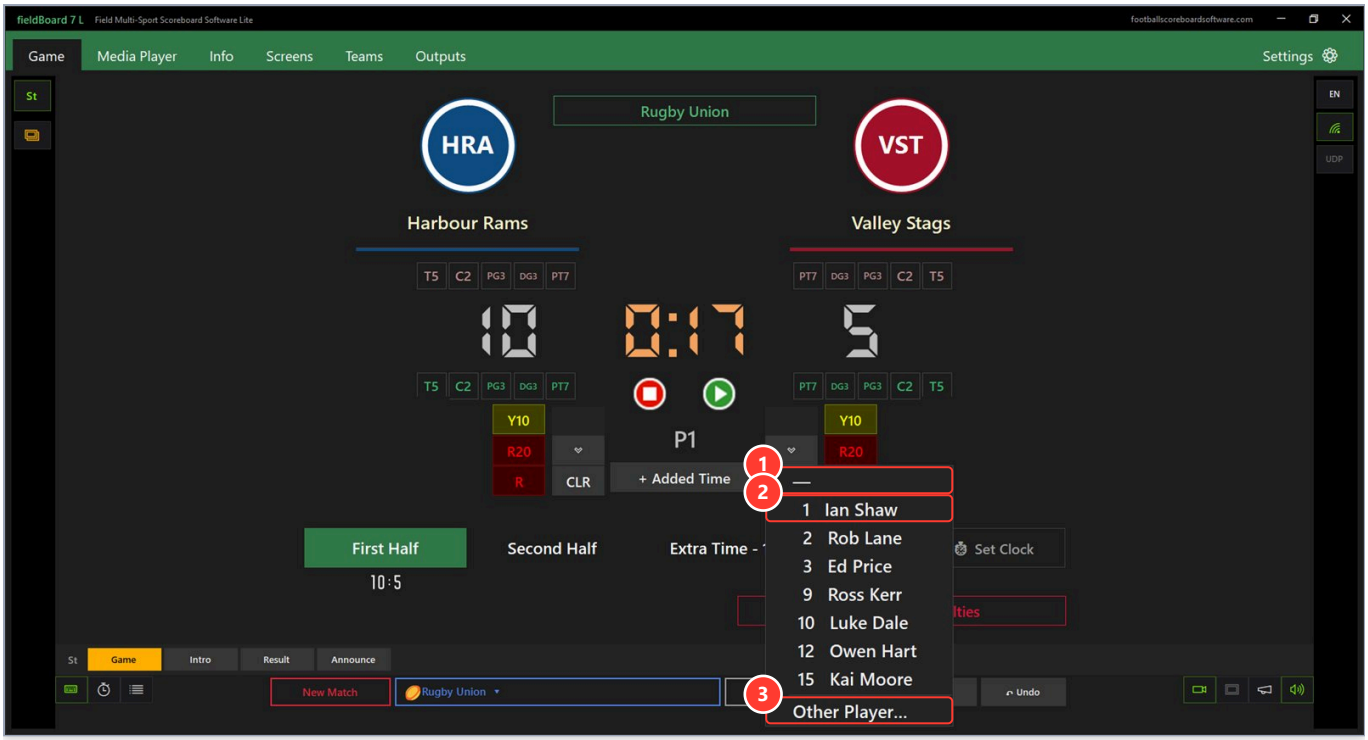


Figure 124. The player list under the home number box (Rugby Union)

#	Control	What it does
1	—	Clears the number box: the next card or score counts for the team only.
2	**Players (Number · Name)**	The team list of the Teams page, sorted by number; the ticked one is the number in the box. Click a player to put the number into the box – it is used by the next score or card button of that team and then cleared.
3	**Other Player...**	Opens the Other Player dialog below: type a number and a name for a player who is not in the list.

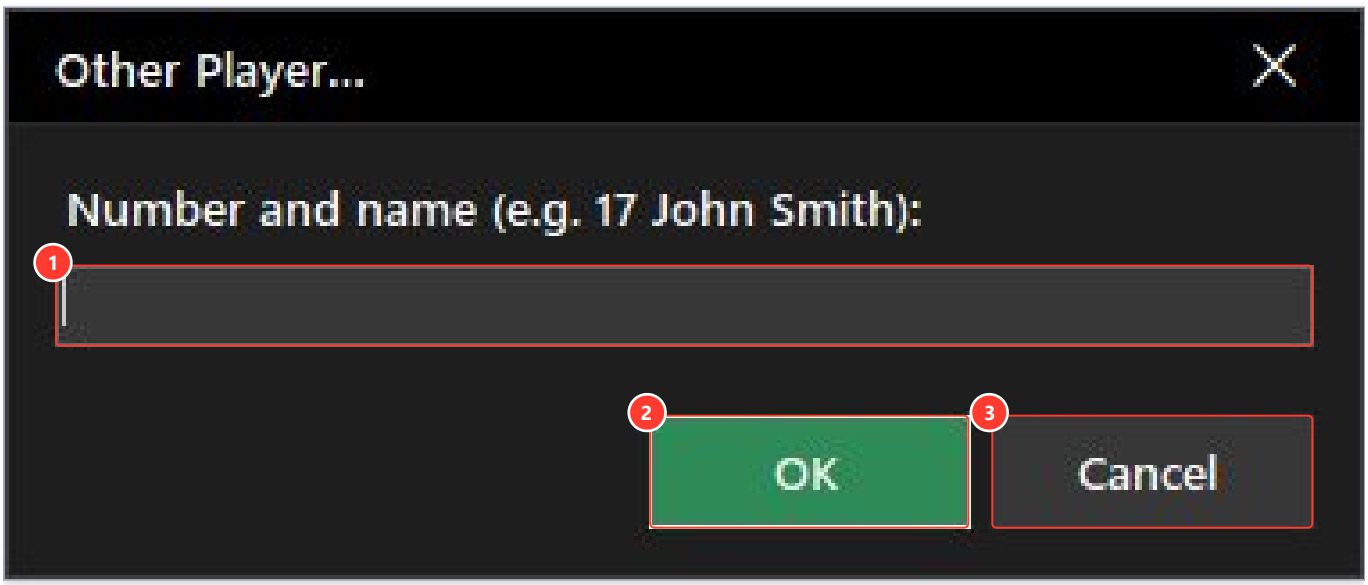


Figure 125. Other Player...

#	Control	What it does
1	**Number and Name**	Type the shirt number, optionally followed by the name: *17 John Smith*, *17 - John Smith*, *#17* or just *17*. Without a number nothing happens.

#	Control	What it does
2	OK	Puts the number into the number box; a player with a name that is not in the team list yet is added to it (and appears in later menus and team lists). `Enter` does the same.
3	Cancel	Closes the dialog and changes nothing (also `Esc` or the × in the title bar).

> **Tip** The number box clears after each credited action, so a wrong number never sticks to the next entry. Players added with Other Player… are saved in the team list of Rugby Union.

Dialogs of the Panel

The panel opens these dialogs. Each one is modal: finish it with OK / Save or close it with Cancel (`Esc`).

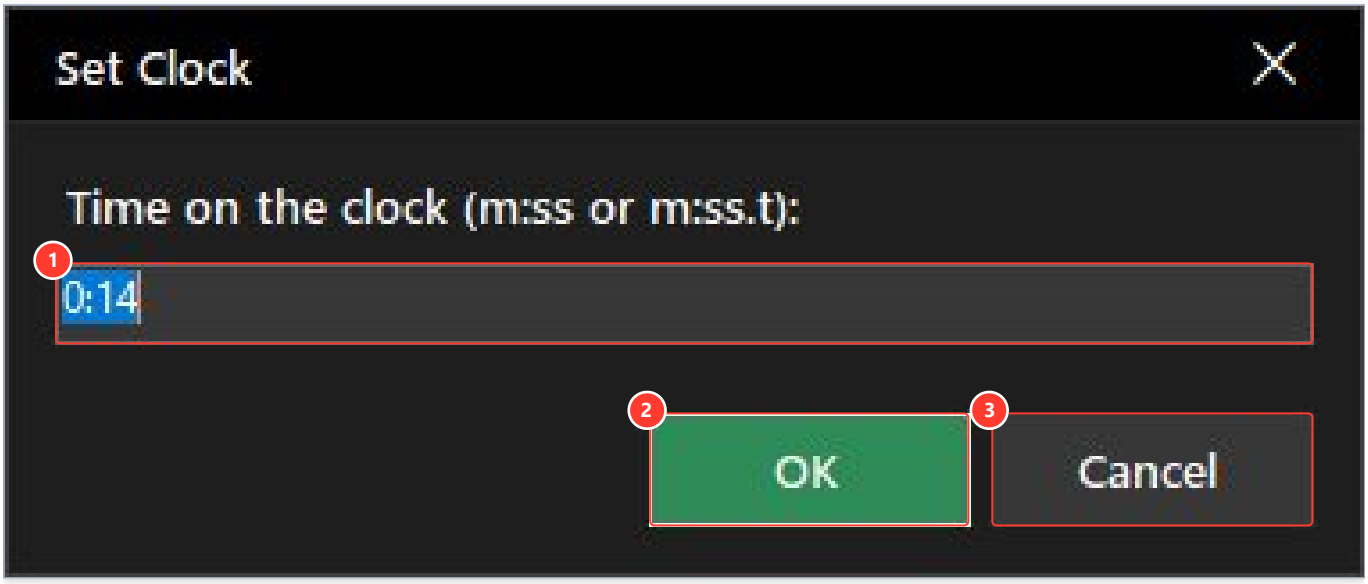


Figure 126. Set Clock (also: double-click the game clock)

#	Control	What it does
1	Time on the Clock	Type the time as the clock should show it (m:ss or m:ss.t; plain seconds work too). In the second half type the running time, e.g. *52:10*.
2	OK	Sets the clock; a time outside the running period is refused. `Enter` does the same.
3	Cancel	Closes the dialog and changes nothing (also `Esc` or the × in the title bar).

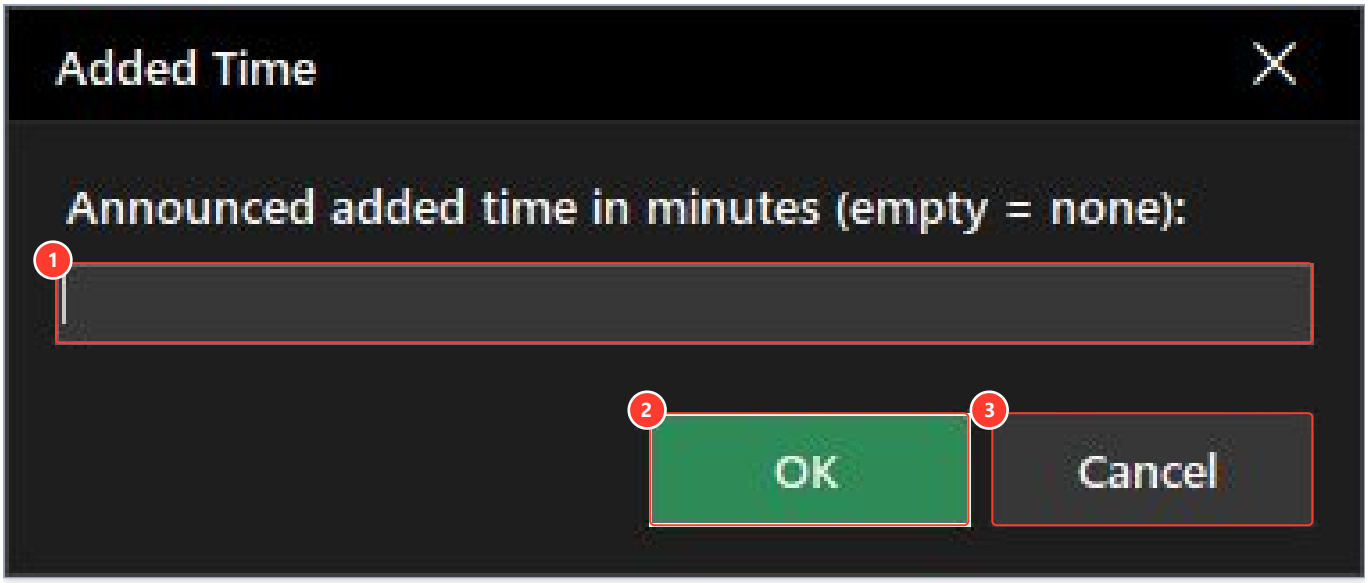


Figure 127. Added Time

#	Control	What it does
1	Minutes	The added time the officials announce, in whole minutes (0–99, "+3" is accepted). Empty or 0 removes the announcement.
2	OK	Shows "+N" next to the clock and on the boards; going to another period clears it. `Enter` does the same.
3	Cancel	Closes the dialog and changes nothing (also `Esc` or the × in the title bar).

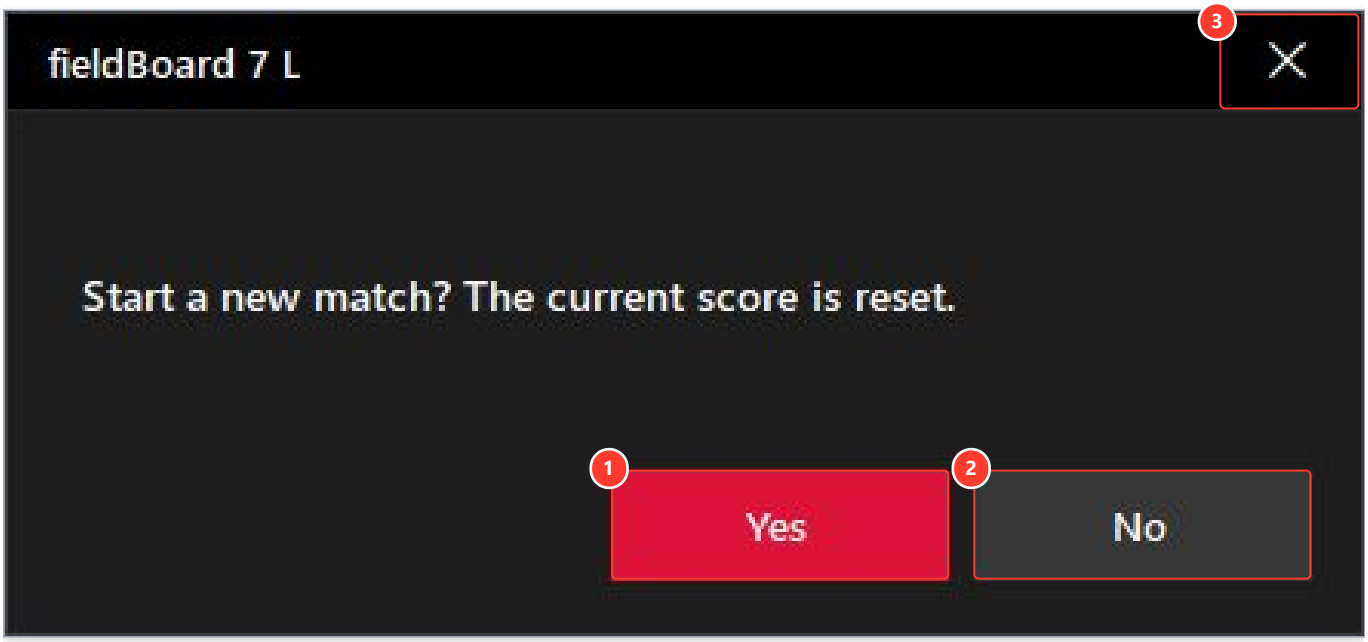


Figure 128. Confirmation of Reset Score & Penalties

#	Control	What it does
1	Yes	Starts a new match of the same discipline: score, period scores, cards, sin bins, shoot-out and clocks are reset; teams and team lists stay. (Undo can still take it back.)
2	No	Keeps the running match.
3	Close (×)	The same as No.

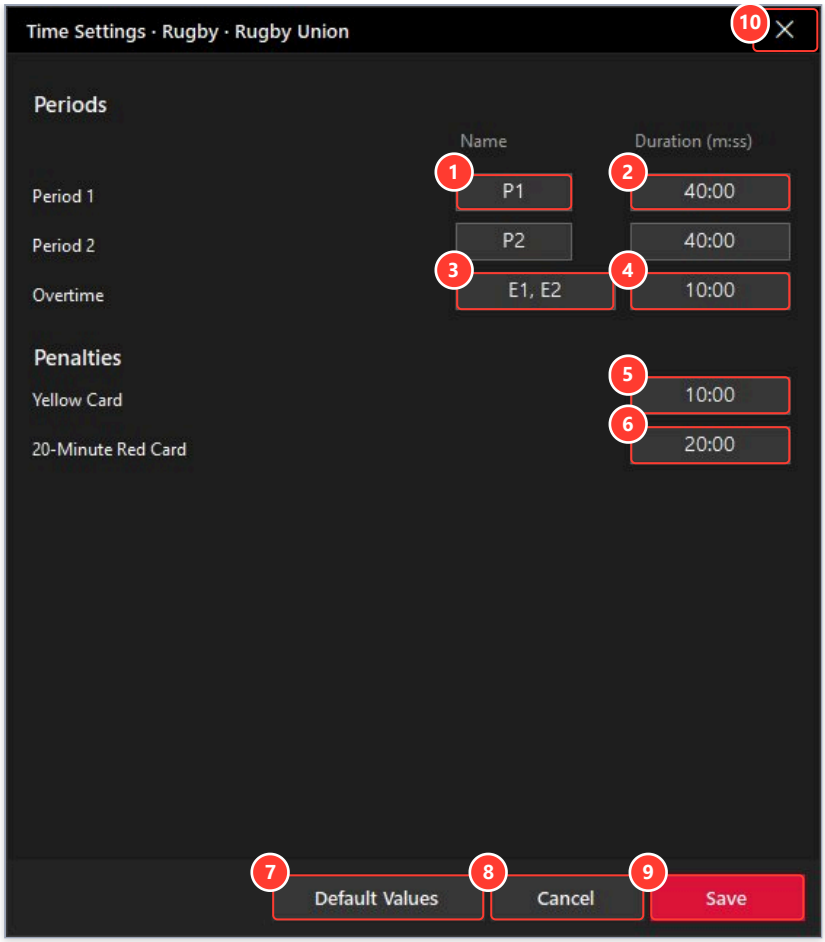


Figure 129. Time Settings · Rugby · Rugby Union

#	Control	What it does
1	**Period Names**	Names of the halves as the boards show them (P1, P2).
2	**Half Durations**	Length of each half (40:00). For age-grade rugby type e.g. 30:00 or 25:00.
3	**Extra-Time Names**	The names of the extra-time periods (E1, E2), separated by commas. Editing them renames those periods on the period button and the boards.
4	**Extra-Time Duration**	Length of each extra-time period.
5	**Yellow Card**	Sin-bin time of the yellow card (the Y10 caption follows the value).
6	**20-Minute Red Card**	Time of the 20-minute red card.
7	**Default Values**	Puts the factory times of the discipline back into the fields after a confirmation. Nothing is saved until you click Save.
8	**Cancel**	Closes the dialog without saving; when you changed a field it asks first whether to discard the changes.
9	**Save**	Checks and saves the times for this discipline (an invalid value is reported in red and nothing is saved). If a match is in progress you are asked whether to start a new match with the new times now.
10	**Close (×)**	The same as Cancel.

Sport picker. The discipline button above the clock and the sport button in the bottom bar open the sport picker (shown for every sport in Choosing the Sport and Discipline). The disciplines of this sport: **Rugby Union** – 15-a-side union with the kicking competition. **Rugby League** – Tackle count, possession and golden-point extra time. **Rugby**

Sevens – 2 × 7 minutes, 2-minute yellow card. **Touch / Tag Rugby** – Touchdowns only, touch count and possession. A running match asks before it switches.

Keyboard shortcuts. The keyboard icon at the bottom left of the Game page opens the shortcut editor with the actions of Rugby Union (its picture is in Keyboard Shortcuts). The default keys of this sport:

Key	Default action in this sport
`F1`	Start / Stop the game clock
`F2`	Next Period
`F11`	Change possession (Rugby League, Touch / Tag Rugby)
`F12`	Undo
`Num 7` / `Num 9`	+5 Try home / guest
`Num 4` / `Num 6`	+2 Conversion home / guest
`Num 1` / `Num 3`	+3 Penalty Goal home / guest
`Num 0` / `Num ,`	Take back Try home / guest
`Num /` / `Num *`	Take back Conversion home / guest
`Num –` / `Num +`	Take back Penalty Goal home / guest
`Num 2`	Horn

Info Page and Screens

The Info, Screens and Teams pages of every sport are shown in The Info Page, The Screens Page and Teams and Players. With Rugby Union the Info page has these rows: **Announce**, **Goal** (with the score type: Try, Conversion, Penalty Goal, Drop Goal or Penalty Try), **Cards** (Yellow Card, 20-Minute Red Card or Red Card), **Red Card** (dots that set 0–4 red cards per team), **Player Intro**, **Substitution**, **Multiple Substitution**, **Team Lists**, **Officials**, **Info Screens** (Intro, Result and Announce).

The Screens page lists the St screens of Rugby Union – Game, Intro, Result, Announce, Goal, Card, Substitution, Substitutions, Player Intro, Team List and Officials. Its Player Panels columns for Rugby Union are No, Name, Points, Penalties.

The player box of each Info page row drops the team list of the chosen team:

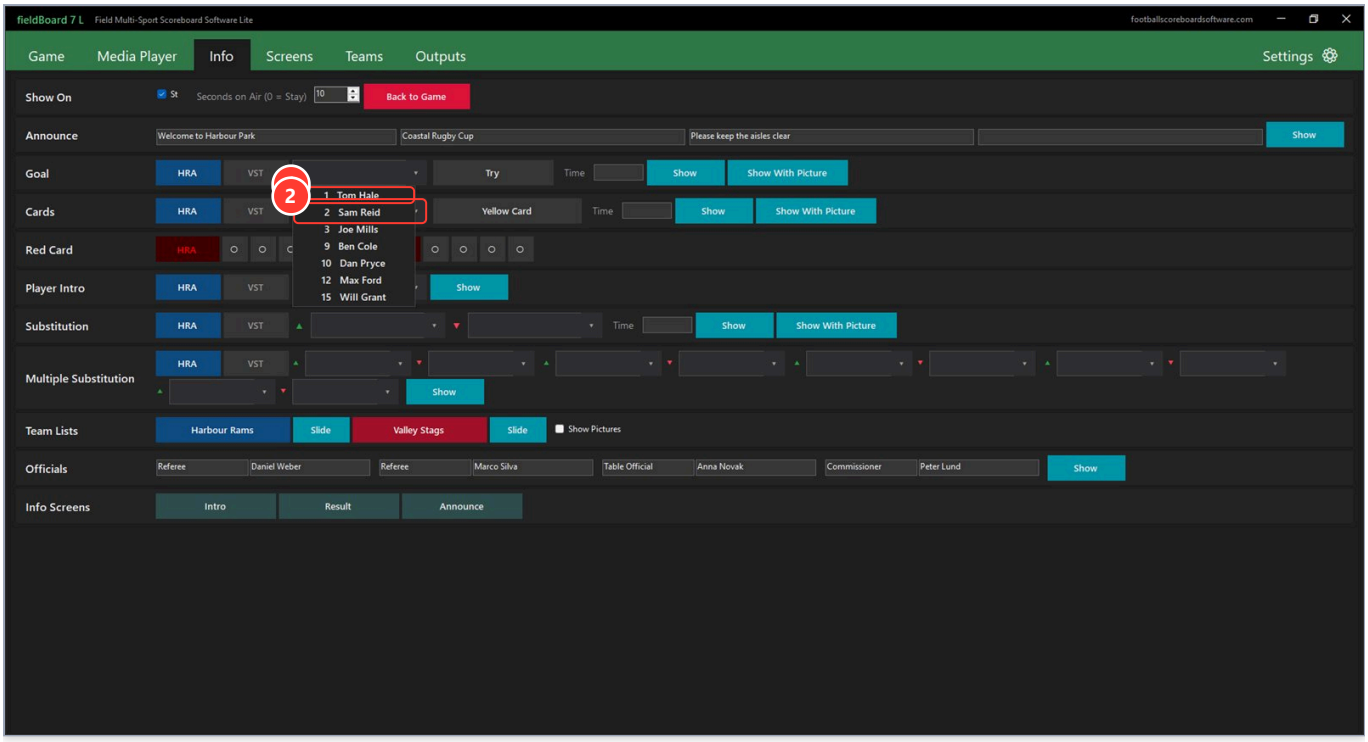


Figure 130. The player list of the Info page (Rugby Union)

#	Control	What it does
1	**Players (Number · Name)**	The players of the chosen team from the Teams page, sorted by number. Click one to put "number name" into the player box; you can still edit the text before you click Show. Without a team list the menu only says that you can type the number and name.
2	**Player Box**	The box the list belongs to; the ▾ at its right edge opens the list (also `Alt` + `↓` or `F4`).

> **Tip** Scoring on the Game page does not put a graphic on air by itself – use the Goal, Cards and Substitution rows of the Info page for that, so the operator decides what the spectators see.

Outputs of Rugby Union

The board of Rugby Union (see Outputs and Sending the Board to the LED Screen for the monitor and the area):

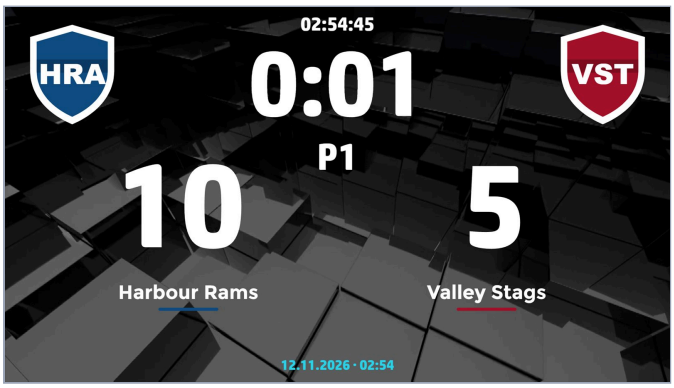


Figure 131. St – Standard (LED) board: logos, score, clock and period, the sin bins of each team while a card runs, the time of day and the date

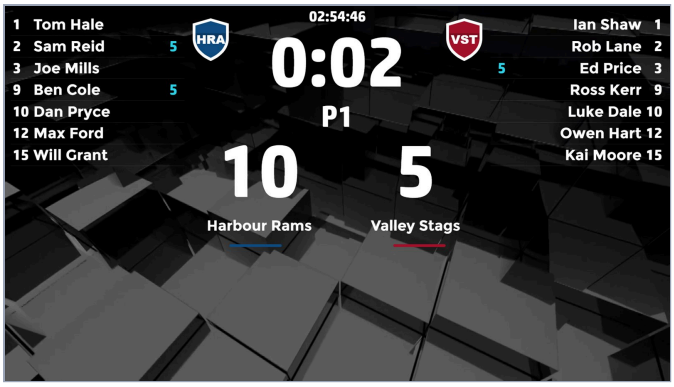


Figure 132. St with Player Panels (Player Panels in the bottom bar of the Game page): both team lists with the points of each player

The other St screens. Event graphics (goal, card, substitution, team list, officials) go back to the game board after the **Seconds on Air** set on the Info page; Intro, Result, Announce stay until you click **Game** in the St row.



Figure 133. Intro – both teams with logos, the event name, the venue and the date; click Intro in the St row of the Game page before the match.

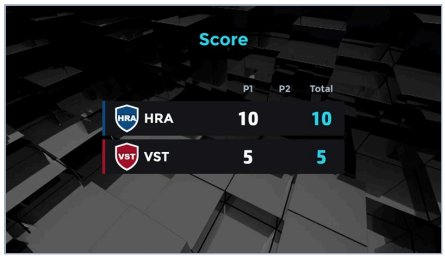


Figure 134. Result – the score of each period and the total; click Result in the St row at half-time and after the final whistle.

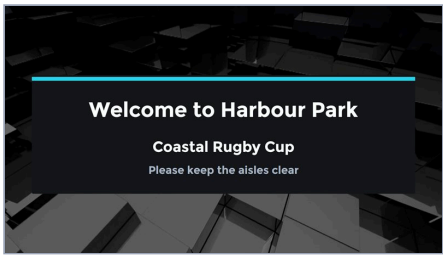


Figure 135. Announce – the title and three lines from the Info page or the Screens page; Show on the Announce row (or Announce in the St row).

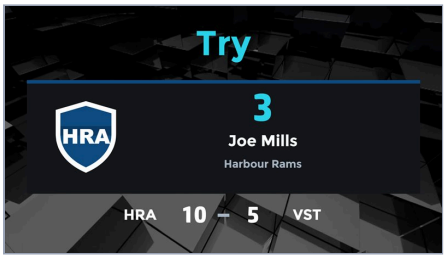


Figure 136. Score graphic – scorer, team and new score; the title is the score type chosen on the Goal row of the Info page (Try, Conversion ...).

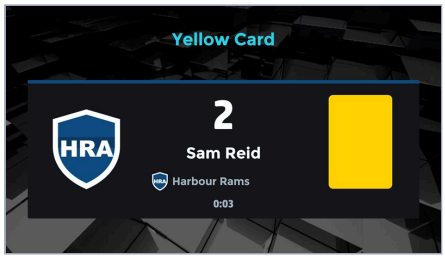


Figure 137. Card – player, team, minute and the card; Show on the Cards row.

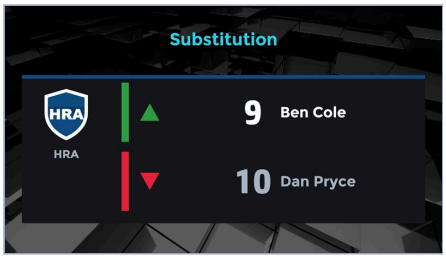


Figure 138. Substitution – player in (▲) and out (▼); Show on the Substitution row of the Info page.

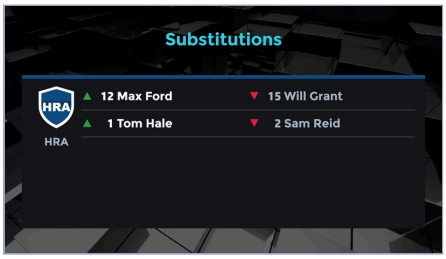


Figure 139. Substitutions – up to five pairs of one team; Show on the Multiple Substitution row.



Figure 140. Player Intro – one player on the whole board; Player Intro row, or Slide on the Team Lists row.

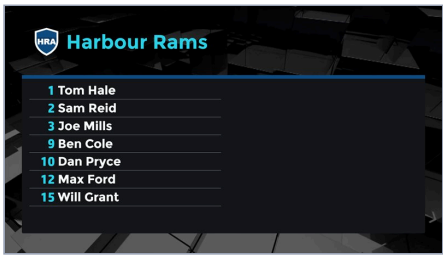


Figure 141. Team List – the players marked Show with numbers and the coach; a team button on the Team Lists row.

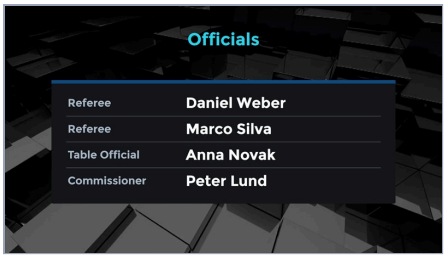


Figure 142. Officials – up to four roles and names; Show on the Officials row.

Remote Control for Rugby Union

The remote page builds itself from the actions of the running discipline (see Remote Control for connecting a phone or tablet). For Rugby Union it looks like this:

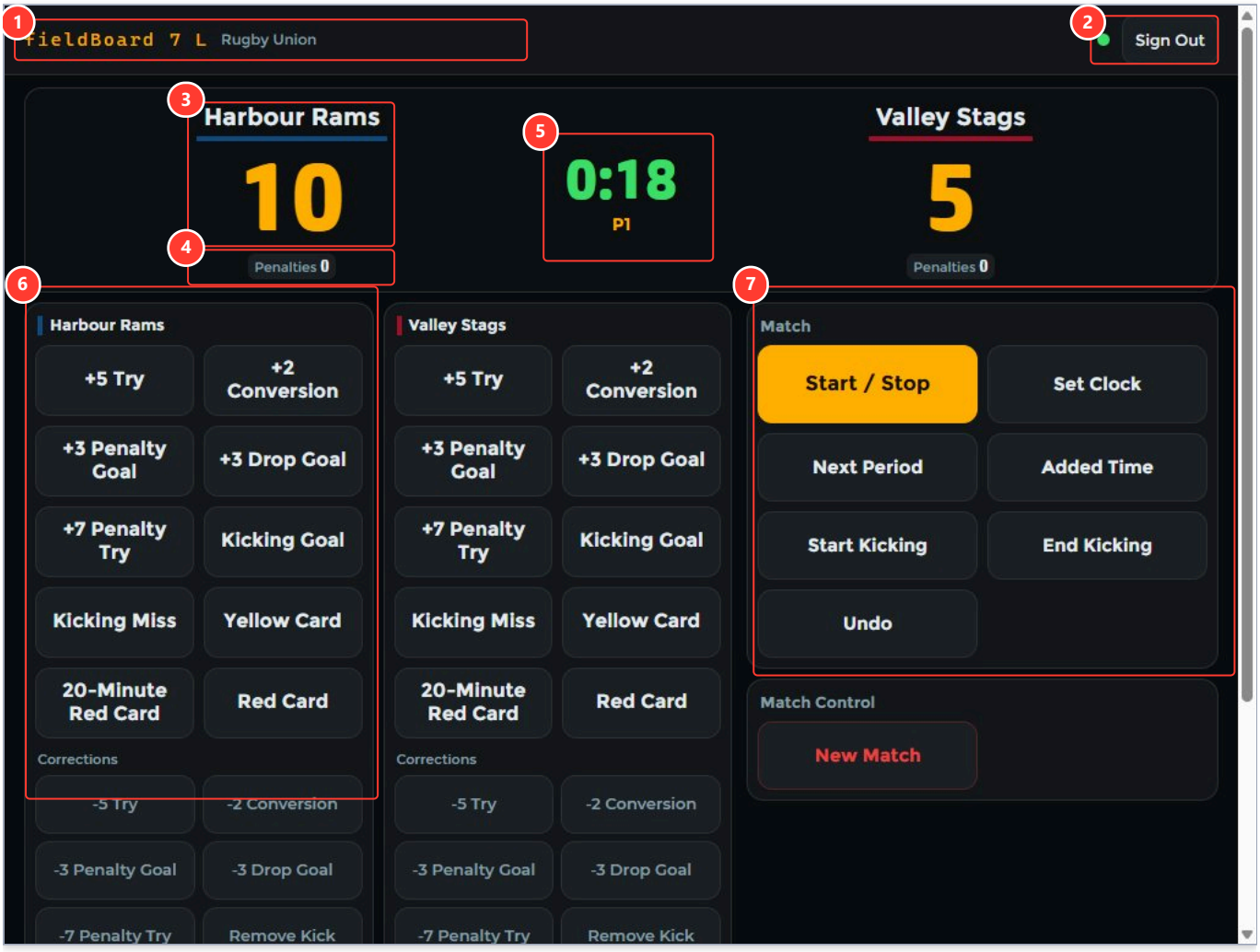


Figure 143. The remote on a tablet (Rugby Union)

#	Control	What it does
1	**Product Name · Sport**	The program name (fieldBoard 7 L) and the running sport or discipline (the discipline alone when its name already contains the sport, e.g. *Rugby Union*). When the operator changes the sport or starts a new match on the PC, the page rebuilds its buttons by itself. The texts of the page follow the language of the program.
2	**Connection Dot / Sign Out**	Green = connected to the scoreboard. **Sign Out** ends the session after a confirmation.

#	Control	What it does
3	**Team Name and Score**	Name (underlined in the team colour; a long name takes two lines) and score of each team, updated several times a second.
4	**Chips**	**Penalties**: the number of the team's sin-bin timers that are running (shown because rugby has timed cards).
5	**Clock and Period**	The game clock (green while it runs) and the period.
6	**Team Section (Home)**	The actions of one team as large buttons (scores, kicking-competition kicks and cards); the guest section is next to it. Below them, the **Corrections** take the last entry of a type back. A score button shows its value once (*+1 Goal*, *-1 Goal*); long captions wrap at a word.
7	**Match Section**	Actions that belong to the match: Start / Stop, Set Clock, Next Period, Added Time, Start Shoot-Out / End Shoot-Out, Undo. **Start / Stop** is the large amber button.

Section	Button	What it does
Team (once per team)	+5 Try / +2 Conversion / +3 Penalty Goal / +3 Drop Goal / +7 Penalty Try	Adds that score for the team.
	Shoot-Out Goal / Shoot-Out Miss	A kick of the kicking competition.
	Yellow Card	Starts a 10-minute sin bin for the team (no player number on the remote).
	20-Minute Red Card	Starts a 20-minute timer.
	Red Card	Counts a red card.
Corrections (per team)	-5 Try … -7 Penalty Try	Takes one score of that type back.
	Remove Kick	Removes the last kick mark.
	Red Card −1	Takes a counted red card back (a sin bin is removed with ✕ on the PC).
Match	Start / Stop	Starts or stops the clock.
	Set Clock	Asks for the clock time.
	Next Period	Next half or extra-time period.
	Added Time	Asks for the announced minutes.
	Start Shoot-Out / End Shoot-Out	Starts or ends the kicking competition.
	Undo	Takes the last action back.
Match Control	New Match	Asks "New Match? This cannot be undone from the remote." – **Yes** resets the match like New Match on the PC.

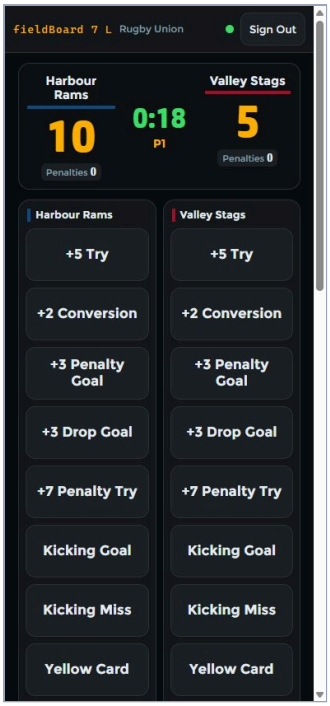


Figure 144. Phone: score bar and the team sections (two columns)

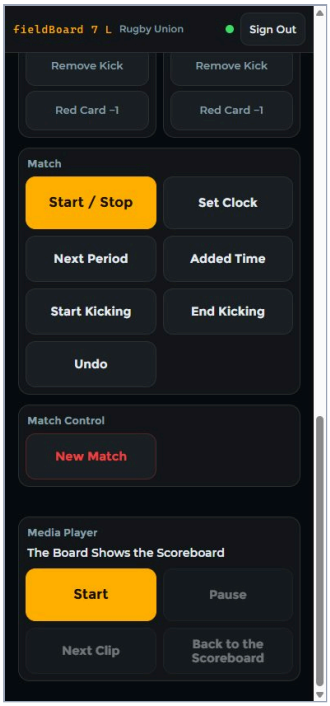


Figure 145. Phone, scrolled down: Corrections, Match and Match Control

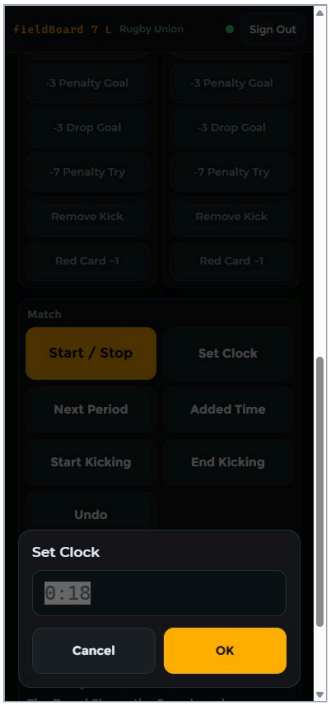


Figure 146. Phone: Set Clock opens a value sheet with the current time (mm:ss); OK sends it

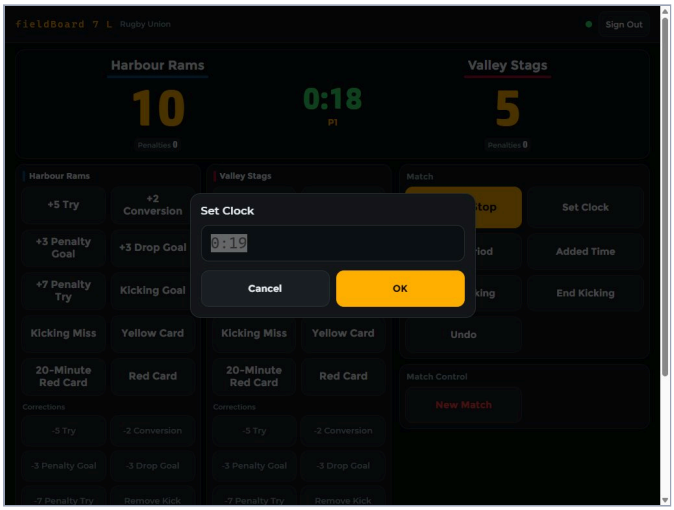


Figure 147. Tablet: the value sheet of Set Clock – type the time and tap OK, or Cancel

> **Note** With Rugby League or Touch / Tag Rugby the Match section also has **Possession Arrow** (gives the ball to the other team and starts a new set), **Tackle +1** , **Tackle -1** and **Tackles 0** .

Scenarios

1. At kick-off click **Start**. The clock counts up from 0:00.
2. Home number 9 scores a try: click ▾ under the home number box, choose 9, then click the green **T5** in the bottom row. The score goes up by 5 and player 9 is credited.
3. The conversion is kicked: click the green **C2**. If the referee rules it out afterwards, click the top-row **C2** to take it back.
4. A guest player is shown a yellow card: type his number (e.g. *6*) in the guest number box and click **Y10** on the guest side. A 10:00 timer appears for player 6 and on the board's sin bin.

5. At 38:00 the referee indicates two minutes: click **+ Added Time** and type *2*. At 40:00 the clock holds and the board counts the added time.
6. When the half ends, click **Stop** and then **Second Half**. The sin-bin timer stopped with the clock and continues when you start the second half at 40:00.
7. Once the 10 minutes are over the timer disappears by itself. Click ✕ next to a timer only when a card was entered by mistake.

1. Pick **Rugby ▸ Rugby League** in the sport picker. The tackle row appears above the panel and Possession buttons at the edges.
2. Click the **Possession** button of the team that receives the kick-off. After each tackle click **Tackle +1**; the board shows "Tackle 3".
3. On a handover click the other team's Possession button – the count starts again at 0. At the sixth tackle Tackle +1 is refused.
4. A try: click the green **T4**, then **C2** for the conversion.
5. Level at full time: click **Extra Time - 1**. The first score in extra time stops the clock and ends the match (golden point).

19 American Football

The **American Football** preset has four 15-minute quarters on a count-down clock, one 15-minute overtime period, an independent play clock (40 / 25 seconds), three timeouts per team per half and the down-and-distance line.

Rule	As implemented
Periods	1st–4th Quarter (Q1–Q4), 15:00 each, counting down. The clock stops at 0:00.
Overtime	OT (button **Overtime**), 15:00, one period.
Scores	Touchdown 6 (**TD**), Extra Point 1 (**PAT**), Two-Point Conversion 2 (**2PT**), Field Goal 3 (**FG**), Safety 2 (**S**). Hover a score button to see its full name.
Play clock	Runs on its own, whatever the game clock does. **40** or **25** starts it from that value; **Stop Play Clock** (or ∅) stops it; a double-click on its digits lets you type a value from 0 to 40 (the double-click does not start it). It is hidden on the boards until started and stops at 0. Changing the quarter resets and hides it.
Timeouts	3 per team in each half, 2 in overtime. A timeout has no countdown: it stops the game clock and uses one timeout.
Downs	Down 1–4, distance 10 yards, ball position on either half of the field (midfield = 50). A change of possession (the **Possession** buttons of the panel, `F11` or the remote's Possession Arrow) starts at 1st & 10.

The Game Panel

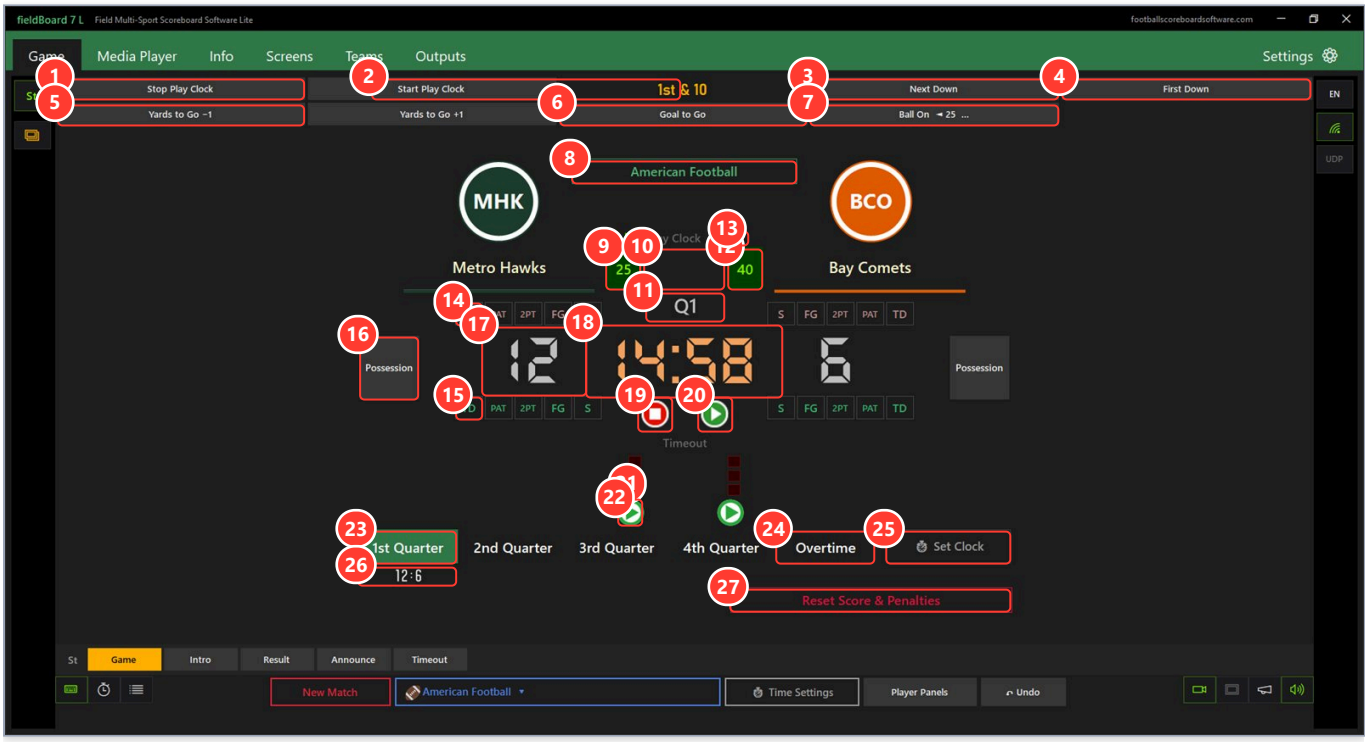


Figure 148. The Game page with the American Football preset

#	Control	What it does
1	**Stop Play Clock**	Stops the play clock (the same as the small ∅ button).
2	**Down & Distance**	The current down and distance, e.g. "1st & 10" or "3rd & Goal"; the boards show it with the ball position.

#	Control	What it does
3	**Next Down**	Goes to the next down (after 4th it starts again at 1st).
4	**First Down**	Sets 1st & 10.
5	**Yards to Go −1 / Yards to Go +1**	Changes the distance to go by one yard (1–99); from "Goal" it counts from 10.
6	**Goal to Go**	Sets the distance to "Goal".
7	**Ball On …**	Shows the ball position on the button itself, with an arrow towards the half it is in (◄ 25 = on the home 25). Click it to type a new position: a yard line with H or G for the home or guest half, e.g. *H35*, *G20*, or *50* for midfield.
8	**Discipline Button**	Shows the running rule preset. Click it to open the sport picker and change the sport or the discipline (the sport button in the bottom bar does the same). See Choosing the Sport and Discipline.
9	**Play Clock 25**	Sets the play clock to 25 seconds and starts it (`F4`).
10	**Play Clock**	The play clock digits under the **Play Clock** label (shown while it runs). Click them to start the play clock from where it stands; **double-click** them to type a value from 0 to 40 (it stays stopped or running as it was).
11	**Period Name**	The running quarter (Q1–Q4, OT) as the boards show it. In American football it sits above the game clock, clear of the timeout block below the clock.
12	**Play Clock 40**	Sets the play clock to 40 seconds and starts it (`F3`).
13	**Stop Play Clock (∅)**	Stops the play clock (tool tip *Stop Play Clock*; the same as the Stop Play Clock button above the panel).
14	**Score Buttons, Top Row (Home)**	Take one score of that type back: **TD** Touchdown, **PAT** Extra Point, **2PT** Two-Point Conversion, **FG** Field Goal, **S** Safety (hover a button to see "− Touchdown"). The button is refused when the team has no such score.
15	**Score Buttons, Bottom Row (Home)**	Add one score of that type (TD 6, PAT 1, 2PT 2, FG 3, S 2; the tool tip shows e.g. "+ Touchdown"). The guest buttons on the right are mirrored.
16	**Possession (Home)**	Gives the ball to this team; the button of the team in possession is lit. A change of possession sets 1st & 10. The guest button is on the right; `F11` changes possession too.
17	**Score (Home)**	The team total.
18	**Game Clock**	The game clock. It is white when stopped and lit while it runs. **Double-click** it to type the time (m:ss or m:ss.t), the same as Set Clock.
19	**Stop**	Stops the game clock (`F1` toggles start / stop).
20	**Start**	Starts the game clock. In a sport without added time it refuses to start when the period has run out (go to the next period first); during a shoot-out the clock cannot be started.
21	**Timeout Lamps (Home)**	One lamp per timeout of the current half; a used timeout turns red.
22	**Take Timeout (Home)**	Takes a timeout for the team (`F5`, guest `F6`): the game clock stops and a lamp lights. The button disappears when the team has no timeout left in this half.
23	**Quarter Buttons**	Go to that quarter: the clock is set to 15:00 and stops, the play clock is reset and hidden. Timeouts come back at the 3rd quarter.

#	Control	What it does
24	**Overtime**	Starts the overtime period (OT on the boards; 2 timeouts per team).
25	**Set Clock**	Asks for the time on the clock (m:ss or m:ss.t). Type the time as it is shown, e.g. *62:30* in the second half of a count-up clock. Setting the clock also clears the added time already played.
26	**Quarter Scores**	The score of each quarter under its button ("12 : 6").
27	**Reset Score & Penalties**	After a confirmation, starts the match afresh: scores, period scores, cards, sin bins, shoot-out and clock go back to the start of the first period. Team names and lists stay.

> **Note** The American Football panel has no player number box: scores are counted for the team. Player graphics (touchdown scorer, player intro) are shown from the Info page.

Dialogs of the Panel

The panel opens these dialogs. Each one is modal: finish it with OK / Save or close it with Cancel (`Esc`).

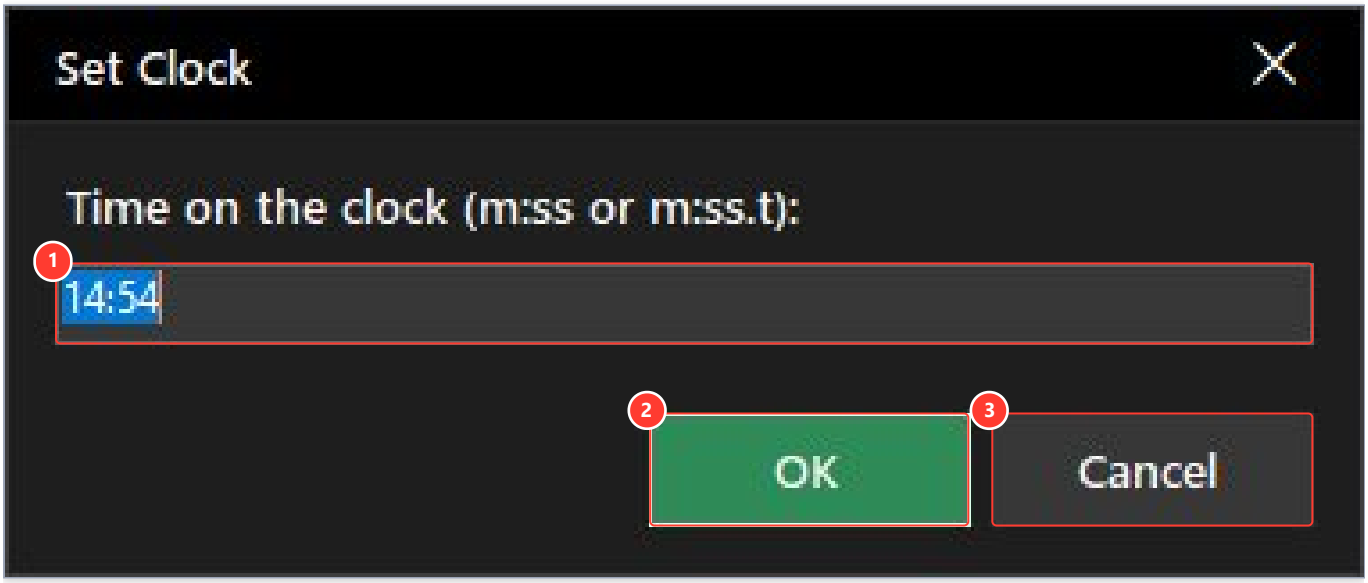


Figure 149. Set Clock (also: double-click the game clock)

#	Control	What it does
1	**Time on the Clock**	Type the time as the clock should show it (m:ss or m:ss.t; plain seconds work too). The clock counts down: type the time left, e.g. *2:00*.
2	**OK**	Sets the clock; a time outside the running period is refused. `Enter` does the same.
3	**Cancel**	Closes the dialog and changes nothing (also `Esc` or the × in the title bar).

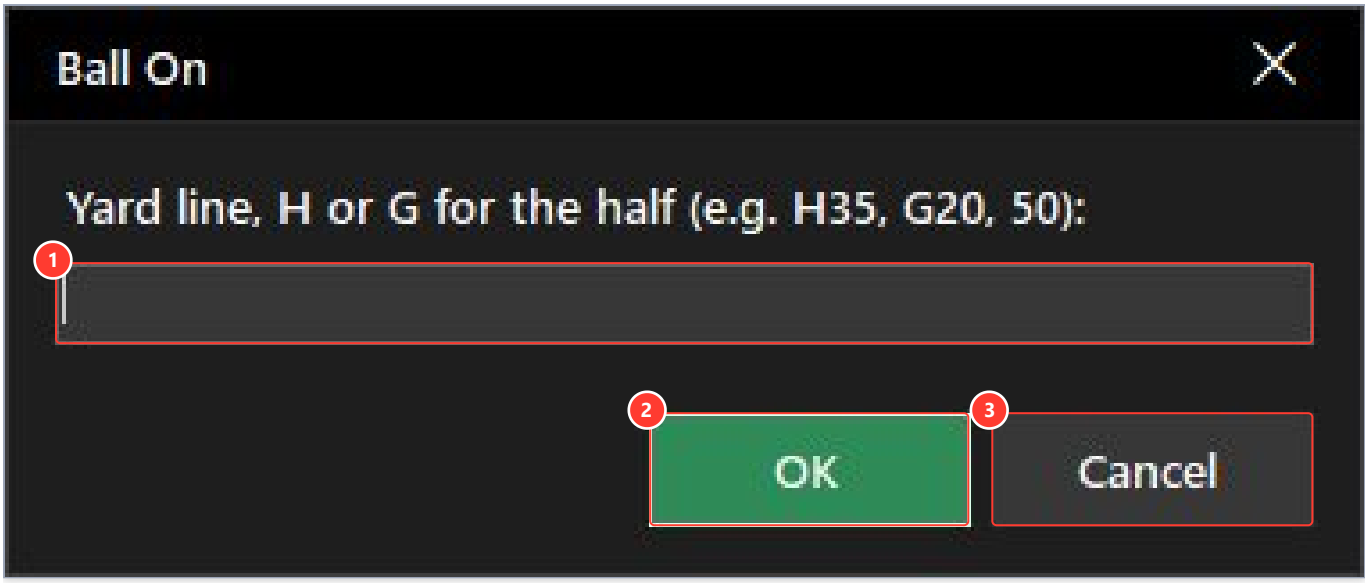


Figure 150. Ball On

#	Control	What it does
1	Yard Line	The yard line with **H** or **G** for the home or guest half, e.g. *H35* (home 35), *G20* (guest 20) or *50* for midfield. Lines 1–50 are accepted.
2	OK	Sets the ball position; the boards show it with an arrow towards that half ("◄ 35" or "20 ►"). `Enter` does the same.
3	Cancel	Closes the dialog and changes nothing (also `Esc` or the × in the title bar).

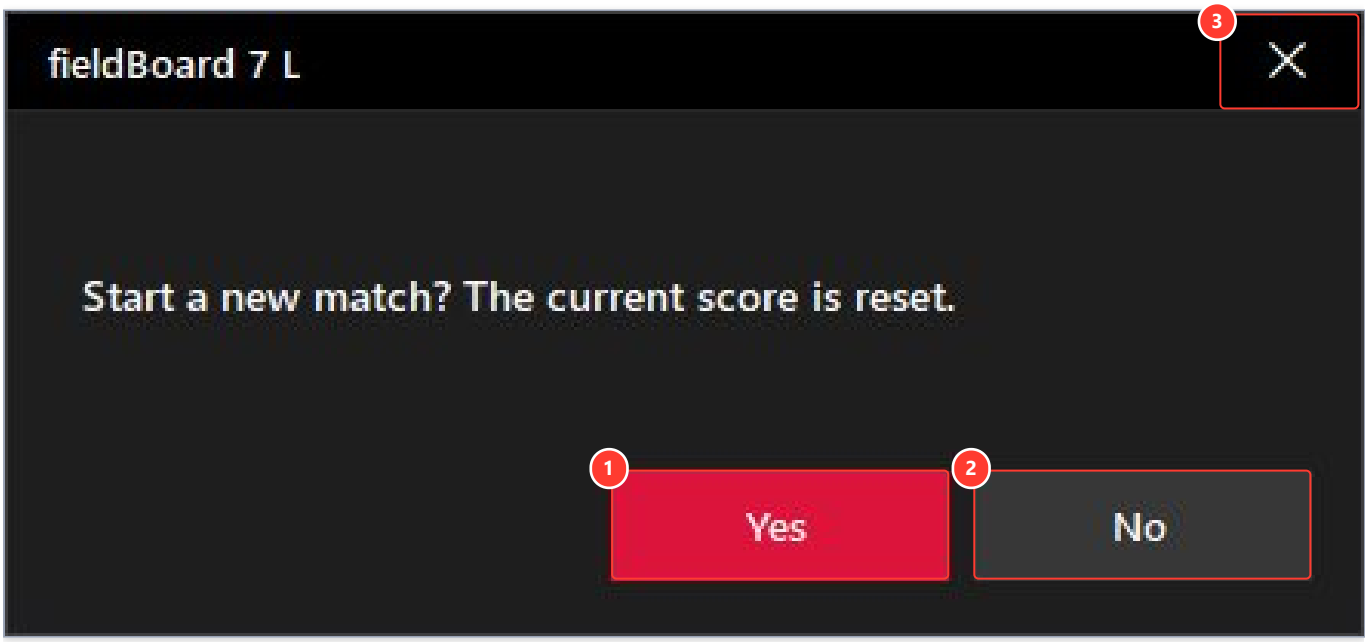


Figure 151. Confirmation of Reset Score & Penalties

#	Control	What it does
1	Yes	Starts a new match of the same discipline: score, period scores, cards, sin bins, shoot-out and clocks are reset; teams and team lists stay. (Undo can still take it back.)
2	No	Keeps the running match.
3	Close (×)	The same as No.

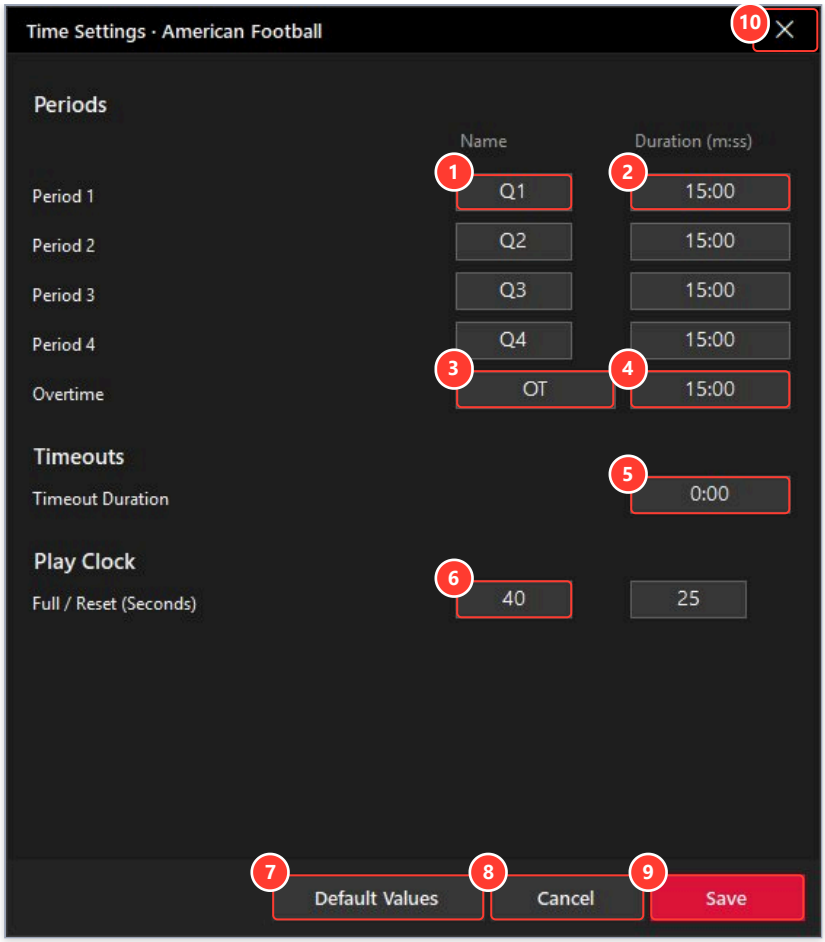


Figure 152. Time Settings · American Football

#	Control	What it does
1	**Quarter Names**	The names of the quarters (Q1–Q4).
2	**Quarter Durations**	Length of each quarter, e.g. 12:00 for high-school football.
3	**Overtime Name**	The name of the overtime as the period button and the boards show it (OT). Type another name to rename it.
4	**Overtime Duration**	Length of the overtime period.
5	**Timeout Duration**	0:00 = a timeout only stops the clock. Type a length (e.g. 1:00) to show a timeout countdown.
6	**Play Clock**	The two values of the **Play Clock** row (40 and 25 seconds) used by the 40 / 25 buttons on the panel.
7	**Default Values**	Puts the factory times of the discipline back into the fields after a confirmation. Nothing is saved until you click Save.
8	**Cancel**	Closes the dialog without saving; when you changed a field it asks first whether to discard the changes.
9	**Save**	Checks and saves the times for this discipline (an invalid value is reported in red and nothing is saved). If a match is in progress you are asked whether to start a new match with the new times now.
10	**Close (×)**	The same as Cancel.

Sport picker. The discipline button above the clock and the sport button in the bottom bar open the sport picker (shown for every sport in Choosing the Sport and Discipline). The disciplines of this sport: **American Football** – The only preset of the sport. A running match asks before it switches.

Keyboard shortcuts. The keyboard icon at the bottom left of the Game page opens the shortcut editor with the actions of American Football (its picture is in Keyboard Shortcuts). The default keys of this sport:

Key	Default action in this sport
`F1`	Start / Stop the game clock
`F2`	Next Period
`F3` / `F4`	Play clock 40 / play clock 25
`F5` / `F6`	Timeout home / guest
`Num 5`	End Timeout
`F11`	Change possession (sets 1st & 10)
`F12`	Undo
`Num 7` / `Num 9`	+6 Touchdown home / guest
`Num 4` / `Num 6`	+1 Extra Point home / guest
`Num 1` / `Num 3`	+2 Two-Point Conversion home / guest
`Num 0` / `Num ,`	Take back Touchdown home / guest
`Num /` / `Num *`	Take back Extra Point home / guest
`Num –` / `Num +`	Take back Two-Point Conversion home / guest
`Num 2`	Horn

Info Page and Screens

The Info, Screens and Teams pages of every sport are shown in The Info Page, The Screens Page and Teams and Players. With American Football the Info page has these rows: **Announce**, **Goal** (with the score type: Touchdown, Extra Point, Two-Point Conversion, Field Goal or Safety), **Player Intro**, **Substitution**, **Multiple Substitution**, **Team Lists**, **Officials**, **Info Screens** (Intro, Result, Announce and Timeout).

The Screens page lists the St screens of American Football – Game, Intro, Result, Announce, Timeout, Goal, Substitution, Substitutions, Player Intro, Team List and Officials (no Card screen: American football has no cards) (the Timeout screen exists only in sports with team timeouts). Its Player Panels columns for American Football are No, Name, Points.

The player box of each Info page row drops the team list of the chosen team:

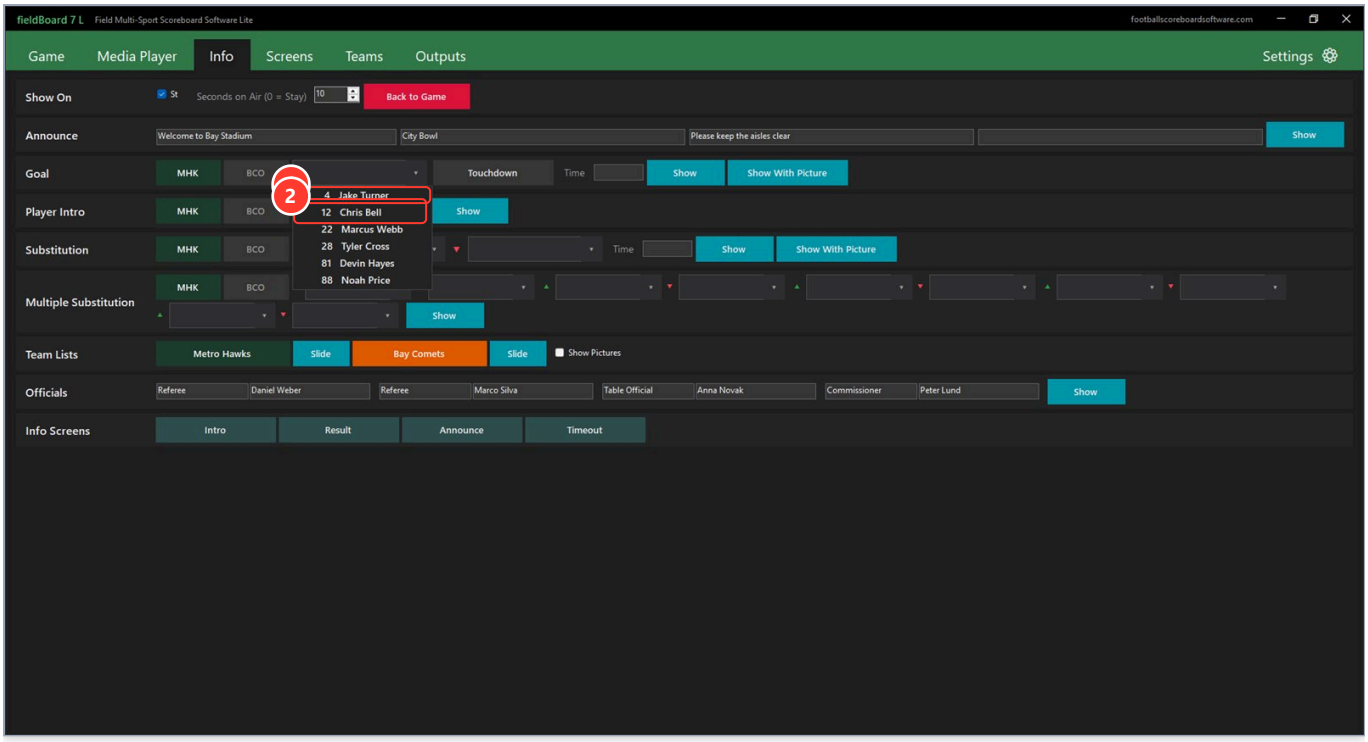


Figure 153. The player list of the Info page (American Football)

#	Control	What it does
1	**Players (Number · Name)**	The players of the chosen team from the Teams page, sorted by number. Click one to put "number name" into the player box; you can still edit the text before you click Show. Without a team list the menu only says that you can type the number and name.
2	**Player Box**	The box the list belongs to; the ▾ at its right edge opens the list (also `Alt` + `↓` or `F4`).

> **Tip** Scoring on the Game page does not put a graphic on air by itself – use the Goal, Cards and Substitution rows of the Info page for that, so the operator decides what the spectators see.

Outputs of American Football

The board of American Football (see Outputs and Sending the Board to the LED Screen for the monitor and the area):

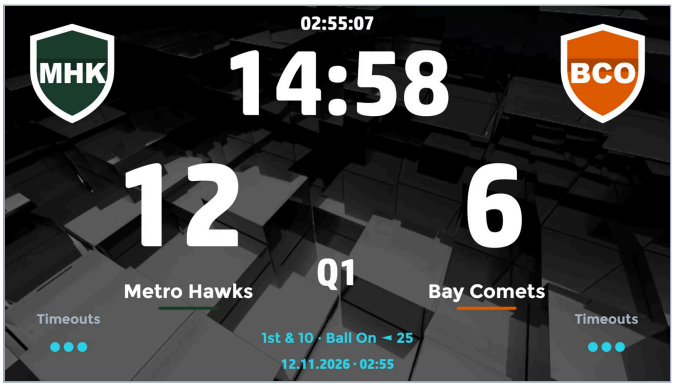


Figure 154. St – Standard (LED) board: logos, score, clock and quarter, the timeouts left (dots) and the down-and-distance line with the ball position

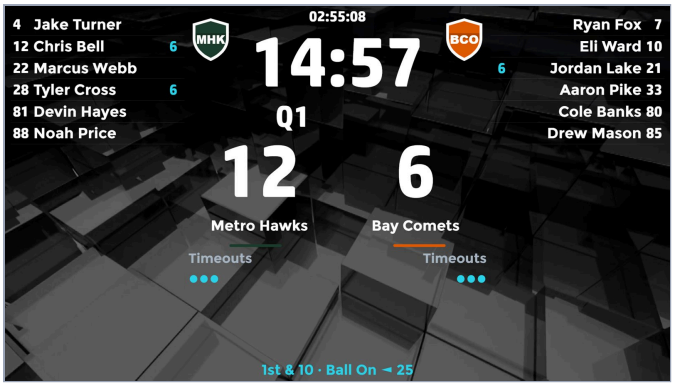


Figure 155. St with Player Panels (Player Panels in the bottom bar of the Game page): both rosters with the points of each player

The other St screens. Event graphics (goal, card, substitution, team list, officials) go back to the game board after the **Seconds on Air** set on the Info page; Intro, Result, Announce, Timeout stay until you click **Game** in the St row.

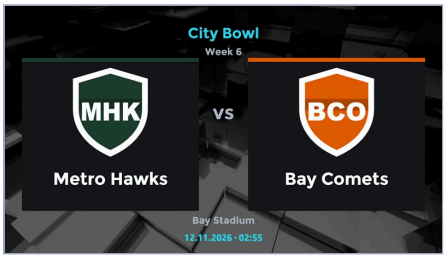


Figure 156. Intro – both teams with logos, the event name, the venue and the date; click Intro in the St row of the Game page before the match.

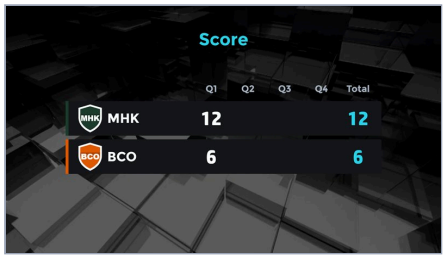


Figure 157. Result – the score of each period and the total; click Result in the St row at half-time and after the final whistle.

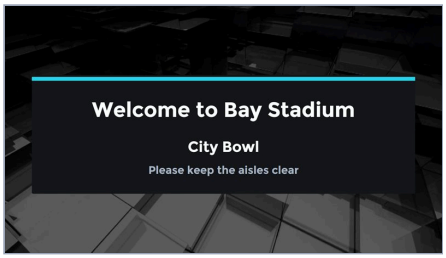


Figure 158. Announce – the title and three lines from the Info page or the Screens page; Show on the Announce row (or Announce in the St row).

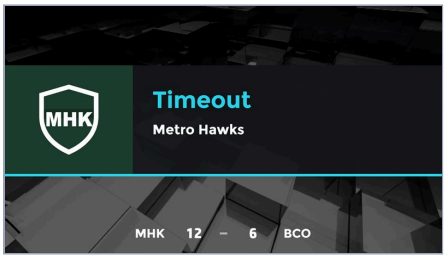


Figure 159. Timeout – the logo and name of the team that called the last timeout; click Timeout in the St row. With the factory timeout length 0:00 there is no countdown.

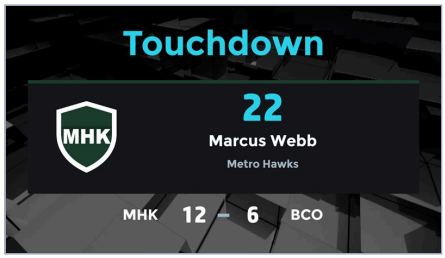


Figure 160. Score graphic – scorer, team and new score; the title is the score type chosen on the Goal row (Touchdown, Field Goal …).

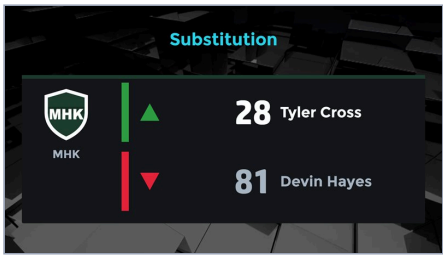


Figure 161. Substitution – player in (▲) and out (▼); Show on the Substitution row of the Info page.

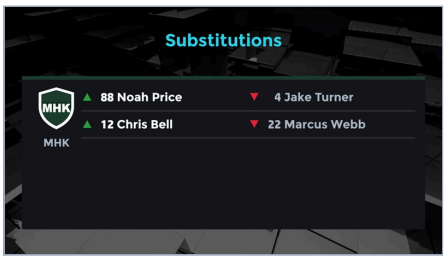


Figure 162. Substitutions – up to five pairs of one team; Show on the Multiple Substitution row.

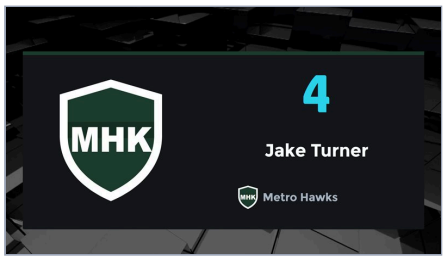


Figure 163. Player Intro – one player on the whole board; Player Intro row, or Slide on the Team Lists row.

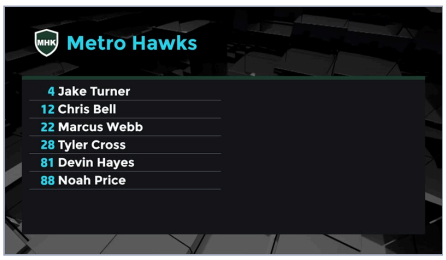


Figure 164. Team List – the players marked Show with numbers and the coach; a team button on the Team Lists row.

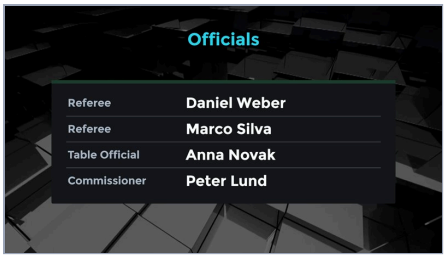


Figure 165. Officials – up to four roles and names; Show on the Officials row.

Remote Control for American Football

The remote page builds itself from the actions of the running discipline (see Remote Control for connecting a phone or tablet). For American Football it looks like this:

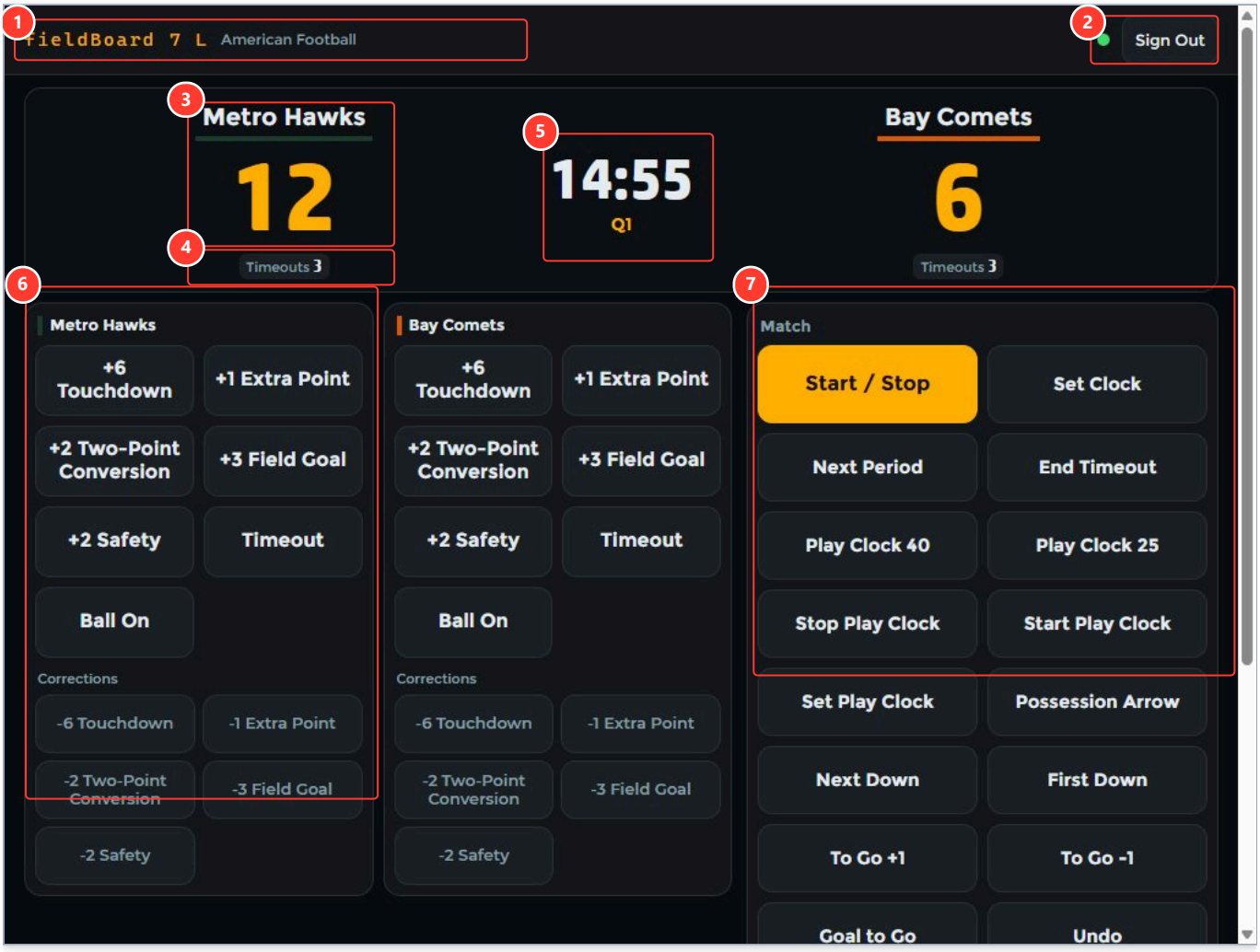


Figure 166. The remote on a tablet (American Football)

#	Control	What it does
1	**Product Name · Sport**	The program name (fieldBoard 7 L) and the running sport or discipline (the discipline alone when its name already contains the sport, e.g. *Rugby Union*). When the operator changes the sport or starts a new match on the PC, the page rebuilds its buttons by itself. The texts of the page follow the language of the program.
2	**Connection Dot / Sign Out**	Green = connected to the scoreboard. **Sign Out** ends the session after a confirmation.

#	Control	What it does
3	**Team Name and Score**	Name (underlined in the team colour; a long name takes two lines) and score of each team, updated several times a second.
4	**Chips**	Timeouts left in the current half.
5	**Clock and Period**	The game clock (green while it runs) and the period; the play clock appears under the clock while it runs.
6	**Team Section (Home)**	The actions of one team as large buttons (scores, Timeout and Ball On); the guest section is next to it. Below them, the **Corrections** take the last entry of a type back. A score button shows its value once (*+1 Goal*, *-1 Goal*); long captions wrap at a word.
7	**Match Section**	Actions that belong to the match: Start / Stop, Set Clock, Next Period, End Timeout, Play Clock 40 / Play Clock 25, Stop Play Clock, Set Play Clock, Possession Arrow, Next Down / First Down, To Go +1 / To Go -1 / Goal to Go, Undo. **Start / Stop** is the large amber button.

Section	Button	What it does
Team (once per team)	+6 Touchdown / +1 Extra Point / +2 Two-Point Conversion / +3 Field Goal / +2 Safety	Adds that score.
	Timeout	Takes a timeout for the team (stops the clock).
	Ball On	Asks for the yard line (1–50) in that team's half.
Corrections (per team)	-6 Touchdown … -2 Safety	Takes one score of that type back.
Match	Start / Stop	Starts or stops the game clock.
	Set Clock	Asks for the time.
	Next Period	Next quarter or overtime.
	End Timeout	Ends a running timeout countdown (only when a timeout length is set).
	Play Clock 40 / Play Clock 25	Starts the play clock from 40 or 25 seconds.
	Stop Play Clock	Stops the play clock.
	Set Play Clock	Asks for the play clock in seconds (0 to 40).
	Possession Arrow	Gives the ball to the other team; down and distance go back to 1st & 10.
	Next Down / First Down	As on the panel.
	To Go +1 / To Go -1 / Goal to Go	Changes the distance.
	Undo	Takes the last action back.
Match Control	New Match	Asks "New Match? This cannot be undone from the remote." – **Yes** resets the match like New Match on the PC.

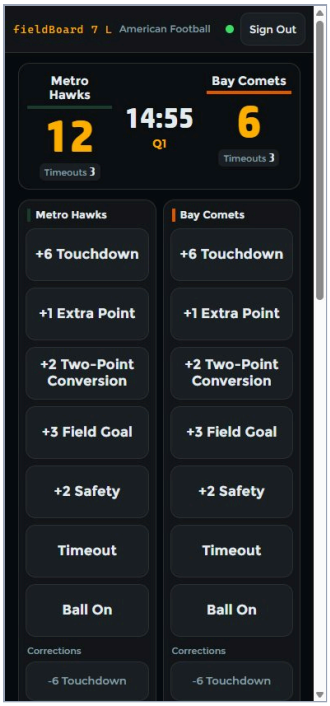


Figure 167. Phone: score bar and the team sections (two columns)

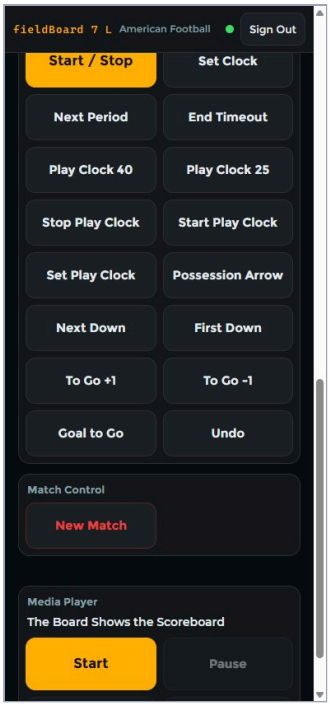


Figure 168. Phone, scrolled down: Corrections, Match and Match Control

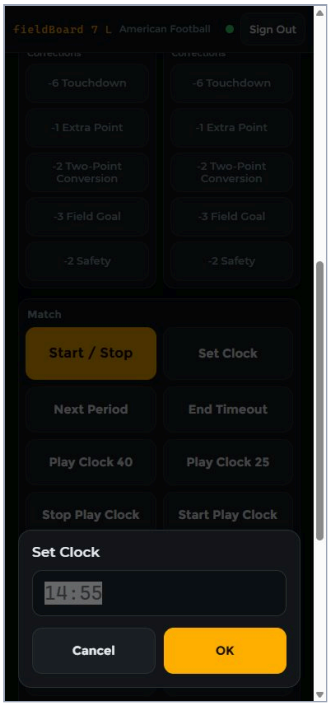


Figure 169. Phone: Set Clock opens a value sheet with the current time (mm:ss); OK sends it

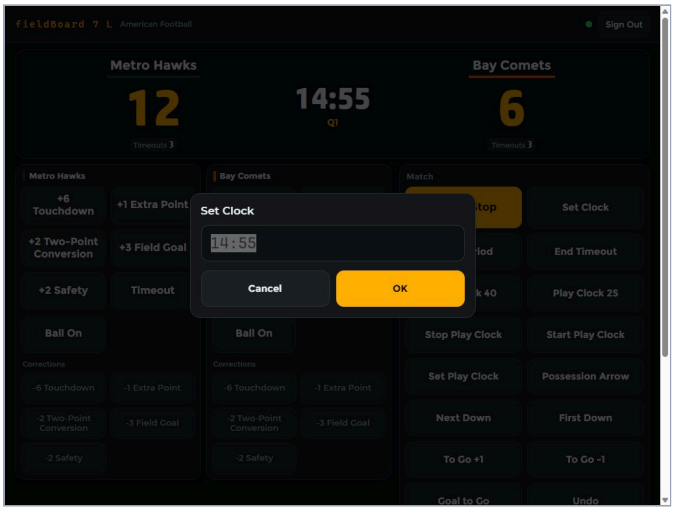


Figure 170. Tablet: the value sheet of Set Clock – type the time and tap OK, or Cancel

Scenarios

1. After the snap is whistled dead, click **Next Down** and change the distance with **Yards to Go −1 / +1**, or click **First Down** when the chains move.
2. Click **Ball On …** and type *G8* (ball on the guest 8); then click **Goal to Go**.
3. Click **25** or **40** to run the play clock as the officials signal.
4. Touchdown: click the green **TD** of the home team, then **Stop** the game clock if the officials stop it.
5. The extra point is good: click the green **PAT** (or **2PT** for a two-point conversion). A wrong entry is taken back with the top-row button.
6. The guest team calls a timeout: click the guest ▶ timeout button. The clock stops and one guest lamp turns red.
7. After the kick-off click the receiving team's **Possession** button (it also sets 1st & 10) and **Ball On …** for the new possession.

1. The spotter signs in to the remote on the tablet (see Remote Control).
2. After each play the spotter taps **Next Down**, **To Go -1 / +1** or **First Down**; on a turnover **Possession Arrow**, which also sets 1st & 10. When the play is dead, **Stop Play Clock** stops the play clock.
3. For the ball position the spotter taps **Ball On** in the column of the team whose half the ball is in and types the yard line, e.g. *35*.
4. The PC operator starts the play clock with `F3` (40) or `F4` (25) and the game clock with `F1`.
5. The St board shows "2nd & 6 Ball on 35 ►" at once.

20 Gaelic Football

Gaelic football has two presets: **Gaelic Football Inter-county** (2 × 35:00) and **Gaelic Football Club** (2 × 30:00). Both use a count-up clock with added time, two 10-minute periods of extra time (E1, E2; buttons **Extra Time - 1** / **- 2**) and a penalty shoot-out (**Shoot-Out** button, PEN on the boards; best of 5 then sudden death).

Rule	As implemented
Scores	Goal 3 (G3), Point 1 (P1), Two-Pointer 2 (TP2). The panel and the boards show goals-points ("1-7") besides the total.
Cards	Yellow (Y) is counted; Black Card (B10) sends the player to the sin bin for 10 minutes; Red (R) is counted.
Clock	Counts up, continues into the second half (35:00 → 70:00), holds at the end of each half while the added time counts on.

The Game Panel



Figure 171. The Game page with the Gaelic Football Inter-county preset

#	Control	What it does
1	**Discipline Button**	Shows the running rule preset. Click it to open the sport picker and change the sport or the discipline (the sport button in the bottom bar does the same). See Choosing the Sport and Discipline.
2	**Team Logo (Home)**	The home team's logo, or its short name in the team colour when there is no logo. Logos are set on the Teams page; the guest logo sits on the right.
3	**Team Name Box (Home)**	Type a new name and press `Enter` (or click elsewhere) to save it to the team setup; the boards follow at once. The coloured line under the name is the team colour from the Teams page.
4	**Score Buttons, Top Row (Home)**	Take one score of that type back (− G3 Goal, P1 Point, TP2 Two-Pointer). The button is refused when the team has no such score.

#	Control	What it does
5	**Score Buttons, Bottom Row (Home)**	Add one score of that type (+ G3 Goal, P1 Point, TP2 Two-Pointer); the number in the caption is its value. With a number in the player box the points are credited to that player. The guest buttons on the right are mirrored.
6	**Total Score (Home)**	The total in points (a goal counts 3).
7	**Goals-Points (Home)**	The GAA score as goals-points ("2-0"); the large digits above show the total. Two-pointers count in the points part.
8	**Game Clock**	The game clock. It is white when stopped and lit while it runs. **Double-click** it to type the time (m:ss or m:ss.t), the same as Set Clock.
9	**Stop**	Stops the game clock (`F1` toggles start / stop).
10	**Start**	Starts the game clock. In a sport without added time it refuses to start when the period has run out (go to the next period first); during a shoot-out the clock cannot be started.
11	**Period Name**	The name of the running period (P1, P2, E1 ...) as the boards show it.
12	**Y – Yellow Card (Home)**	Counts a yellow card for the team and the player in the number box. Right-click takes one back.
13	**B10 – Black Card (Home)**	Starts a 10-minute sin-bin timer for the player in the number box (hover to see "Black Card").
14	**R – Red Card (Home)**	Counts a red card. Right-click takes one back.
15	**Player Number Box (Home)**	Type a shirt number (up to three letters or digits) before you press a card or score button: the action is credited to that player and the box clears. Leave it empty for a team-only entry.
16	**Player List ▾ (Home)**	Opens the team list (number and name) from the Teams page; pick a player to fill the number box, or **—** to clear it. **Other Player...** asks for "number name" (see the player list below).
17	**CLR (Home)**	Clears the player number box without doing anything else.
18	**Running Sin Bins (Home)**	Up to three running timed cards of the team: shirt number, time left and a red ✕. Click ✕ to remove exactly the card of that row early (e.g. a wrongly entered card). The rows appear only while a card is running; the board shows them as the team's sin bin.
19	**+ Added Time**	Asks for the announced added time in minutes (empty or 0 = none). The board shows it as "+3"; once the clock has reached the end of the period it shows the time played on, e.g. "+1:24 (+3)".
20	**First Half / Second Half**	Go to that half (clock at 0:00 or 35:00, stopped).
21	**Extra Time - 1 / Extra Time - 2**	Starts extra time (E1 on the boards); click again for Extra Time - 2.
22	**Shoot-Out**	Starts or ends the penalty shoot-out (tool tip *Penalty Shoot-Out*; Goal / Miss buttons at the top of the panel, PEN on the boards).
23	**Set Clock**	Asks for the time on the clock (m:ss or m:ss.t). Type the time as it is shown, e.g. *62:30* in the second half of a count-up clock. Setting the clock also clears the added time already played.
24	**Period Scores**	The score of each regular period under its button ("10 : 5"), filled in as the periods are played.

#	Control	What it does
25	**Reset Score & Penalties**	After a confirmation, starts the match afresh: scores, period scores, cards, sin bins, shoot-out and clock go back to the start of the first period. Team names and lists stay.

Player Number and Player List

Scores and cards can be credited to a player. Type the shirt number in the team's number box, or click the ▾ under it:

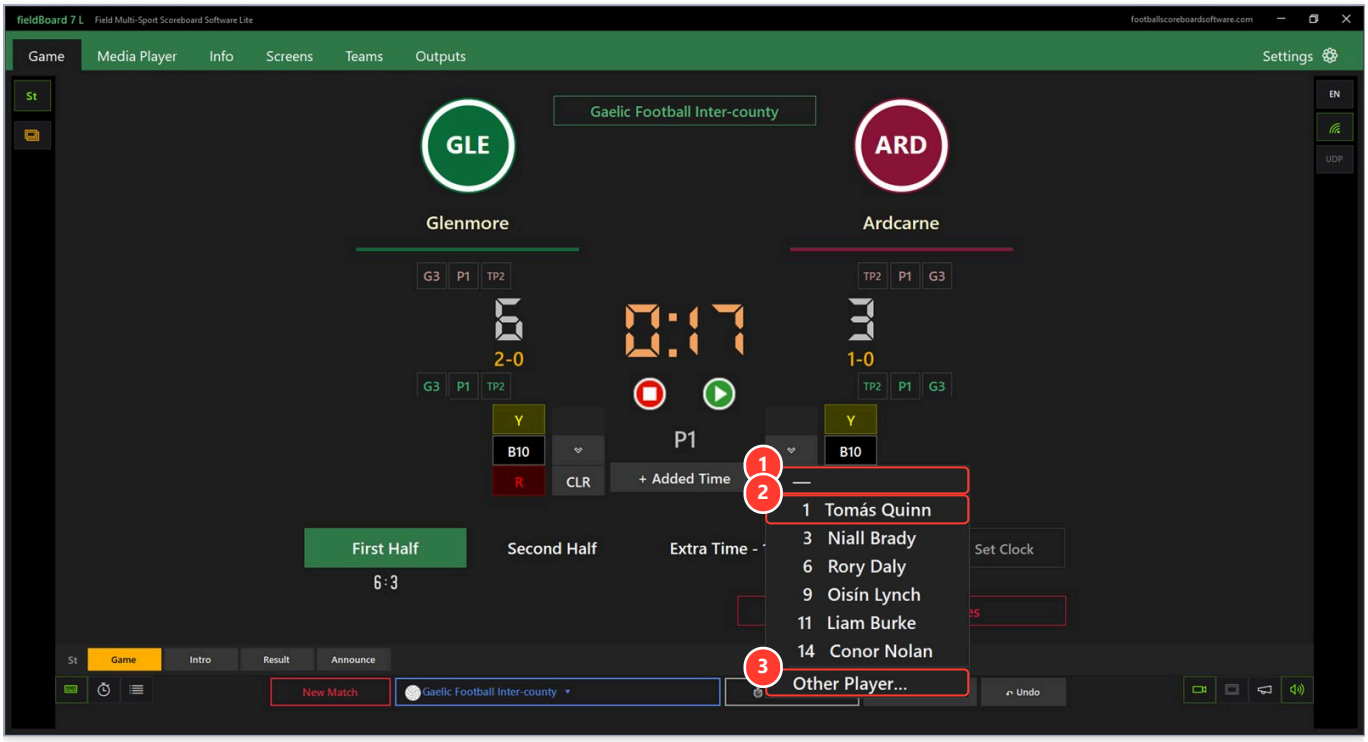


Figure 172. The player list under the home number box (Gaelic Football)

#	Control	What it does
1	**—**	Clears the number box: the next card or score counts for the team only.
2	**Players (Number · Name)**	The team list of the Teams page, sorted by number; the ticked one is the number in the box. Click a player to put the number into the box – it is used by the next score or card button of that team and then cleared.
3	**Other Player...**	Opens the Other Player dialog below: type a number and a name for a player who is not in the list.

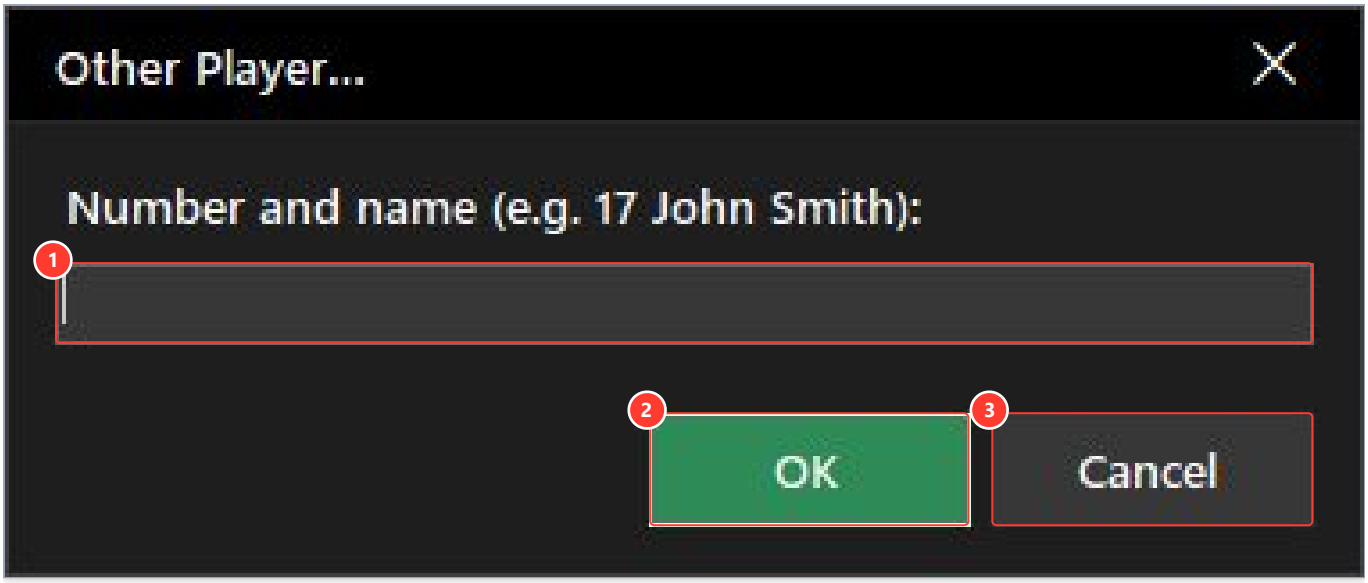


Figure 173. Other Player...

#	Control	What it does
1	**Number and Name**	Type the shirt number, optionally followed by the name: *17 John Smith*, *17 - John Smith*, *#17* or just *17*. Without a number nothing happens.
2	**OK**	Puts the number into the number box; a player with a name that is not in the team list yet is added to it (and appears in later menus and team lists). `Enter` does the same.
3	**Cancel**	Closes the dialog and changes nothing (also `Esc` or the × in the title bar).

Tip The number box clears after each credited action, so a wrong number never sticks to the next entry. Players added with Other Player... are saved in the team list of Gaelic Football.

Dialogs of the Panel

The panel opens these dialogs. Each one is modal: finish it with OK / Save or close it with Cancel (`Esc`).

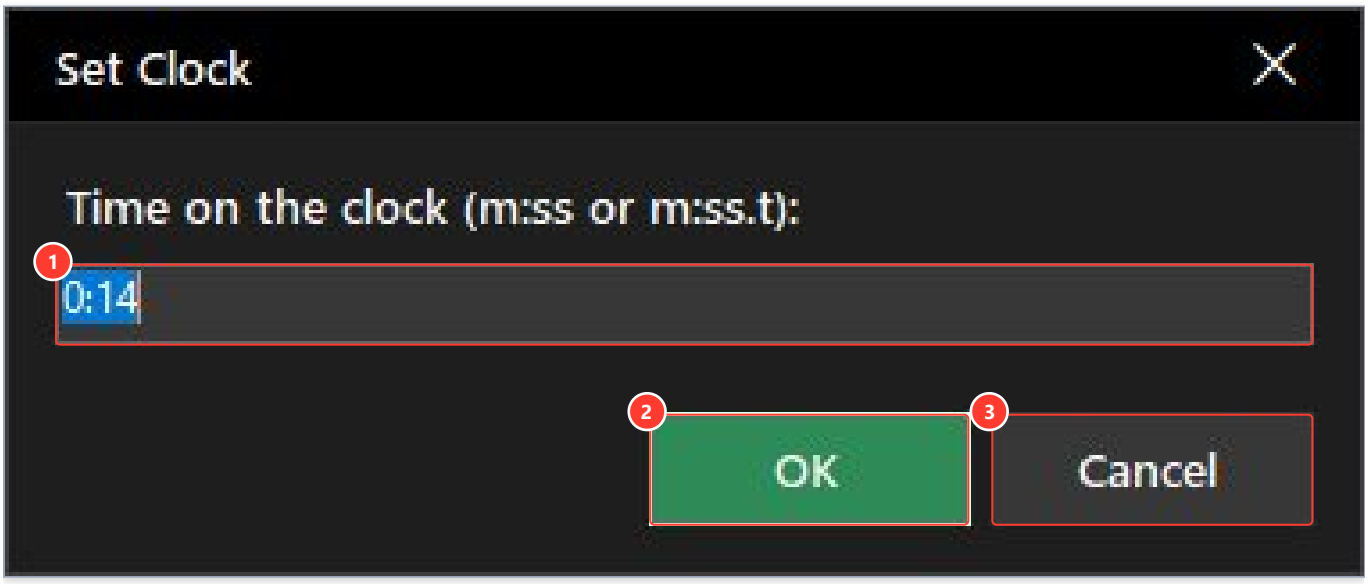


Figure 174. Set Clock (also: double-click the game clock)

#	Control	What it does
1	**Time on the Clock**	Type the time as the clock should show it (m:ss or m:ss.t; plain seconds work too). In the second half type the running time, e.g. *48:00*.
2	**OK**	Sets the clock; a time outside the running period is refused. `Enter` does the same.
3	**Cancel**	Closes the dialog and changes nothing (also `Esc` or the × in the title bar).

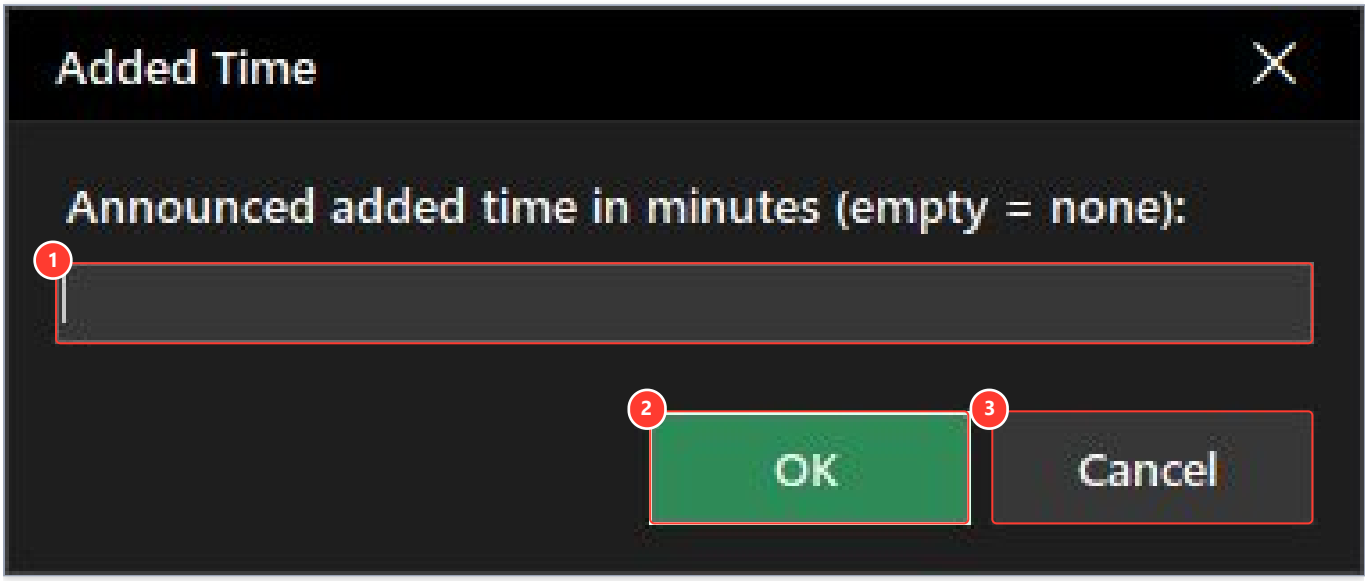


Figure 175. Added Time

#	Control	What it does
1	**Minutes**	The added time the officials announce, in whole minutes (0–99, "+3" is accepted). Empty or 0 removes the announcement.
2	**OK**	Shows "+N" next to the clock and on the boards; going to another period clears it. `Enter` does the same.
3	**Cancel**	Closes the dialog and changes nothing (also `Esc` or the × in the title bar).

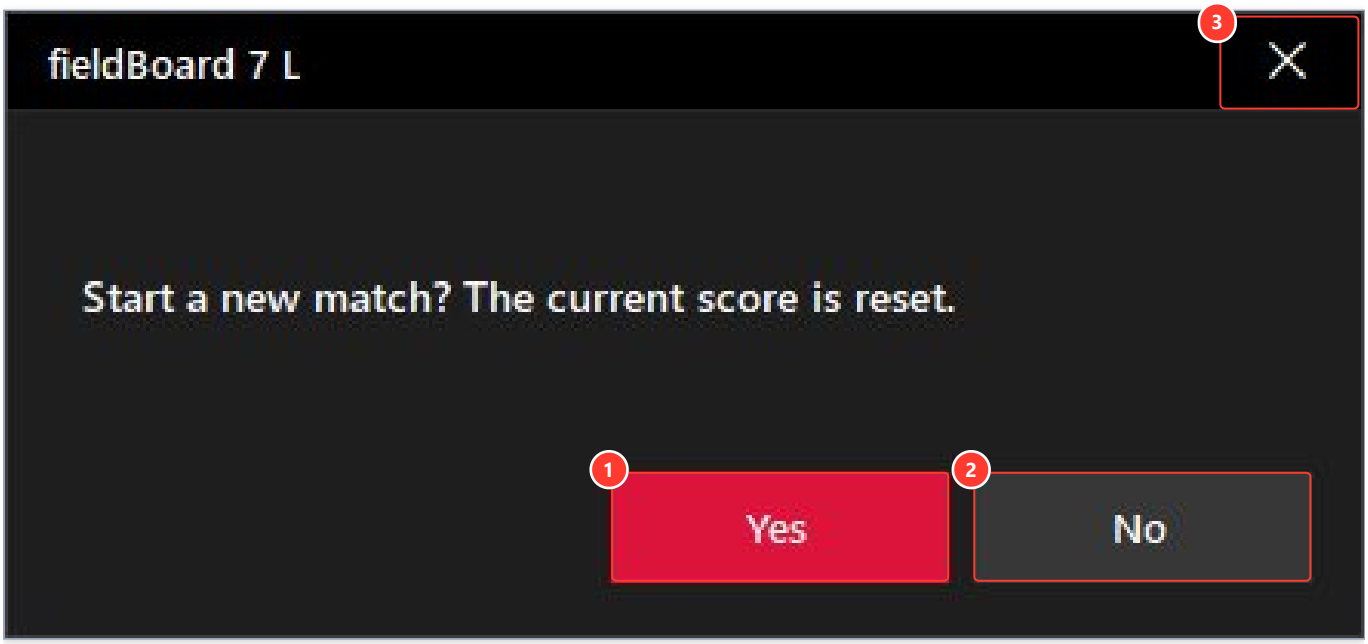


Figure 176. Confirmation of Reset Score & Penalties

#	Control	What it does
1	**Yes**	Starts a new match of the same discipline: score, period scores, cards, sin bins, shoot-out and clocks are reset; teams and team lists stay. (Undo can still take it back.)
2	**No**	Keeps the running match.
3	**Close (×)**	The same as No.



Figure 177. Time Settings · Gaelic Football · Gaelic Football Inter-county

#	Control	What it does
1	**Period Names**	Names of the halves (P1, P2).
2	**Half Durations**	Length of each half; e.g. 30:00 for club or 25:00 for minor grades.
3	**Extra-Time Names**	The names of the extra-time periods (E1, E2), separated by commas; editing them renames those periods.
4	**Extra-Time Duration**	Length of each extra-time period.
5	**Black Card**	Sin-bin time of the black card.
6	**Default Values**	Puts the factory times of the discipline back into the fields after a confirmation. Nothing is saved until you click Save.
7	**Cancel**	Closes the dialog without saving; when you changed a field it asks first whether to discard the changes.

#	Control	What it does
8	Save	Checks and saves the times for this discipline (an invalid value is reported in red and nothing is saved). If a match is in progress you are asked whether to start a new match with the new times now.
9	Close (×)	The same as Cancel.

Sport picker. The discipline button above the clock and the sport button in the bottom bar open the sport picker (shown for every sport in Choosing the Sport and Discipline). The disciplines of this sport: **Gaelic Football Inter-county** – 2 × 35 minutes. **Gaelic Football Club** – 2 × 30 minutes, otherwise the same rules. A running match asks before it switches.

Keyboard shortcuts. The keyboard icon at the bottom left of the Game page opens the shortcut editor with the actions of Gaelic Football (its picture is in Keyboard Shortcuts). The default keys of this sport:

Key	Default action in this sport
`F1`	Start / Stop the game clock
`F2`	Next Period
`F12`	Undo
`Num 7` / `Num 9`	+3 Goal home / guest
`Num 4` / `Num 6`	+1 Point home / guest
`Num 1` / `Num 3`	+2 Two-Pointer home / guest
`Num 0` / `Num ,`	Take back Goal home / guest
`Num /` / `Num *`	Take back Point home / guest
`Num –` / `Num +`	Take back Two-Pointer home / guest
`Num 2`	Horn

Info Page and Screens

The Info, Screens and Teams pages of every sport are shown in The Info Page, The Screens Page and Teams and Players. With Gaelic Football the Info page has these rows: **Announce**, **Goal** (with the score type: Goal, Point or Two-Pointer), **Cards** (Yellow Card, Black Card or Red Card), **Red Card** (dots that set 0–4 red cards per team), **Player Intro**, **Substitution**, **Multiple Substitution**, **Team Lists**, **Officials**, **Info Screens** (Intro, Result and Announce).

The Screens page lists the St screens of Gaelic Football – Game, Intro, Result, Announce, Goal, Card, Substitution, Substitutions, Player Intro, Team List and Officials. Its Player Panels columns for Gaelic Football are No, Name, Points, Penalties.

The player box of each Info page row drops the team list of the chosen team:

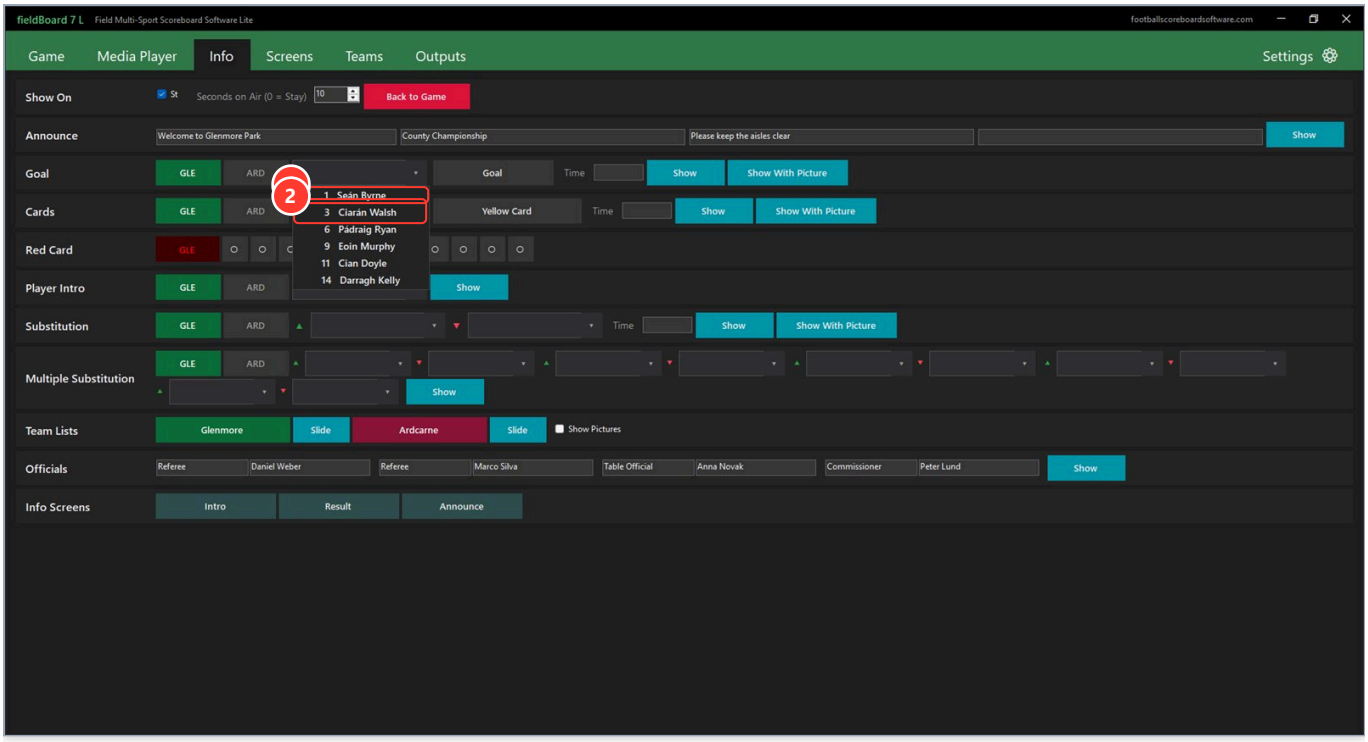


Figure 178. The player list of the Info page (Gaelic Football)

#	Control	What it does
1	**Players (Number · Name)**	The players of the chosen team from the Teams page, sorted by number. Click one to put "number name" into the player box; you can still edit the text before you click Show. Without a team list the menu only says that you can type the number and name.
2	**Player Box**	The box the list belongs to; the ▾ at its right edge opens the list (also `Alt` + `↓` or `F4`).

> **Tip** Scoring on the Game page does not put a graphic on air by itself – use the Goal, Cards and Substitution rows of the Info page for that, so the operator decides what the spectators see.

Outputs of Gaelic Football

The board of Gaelic Football (see Outputs and Sending the Board to the LED Screen for the monitor and the area):

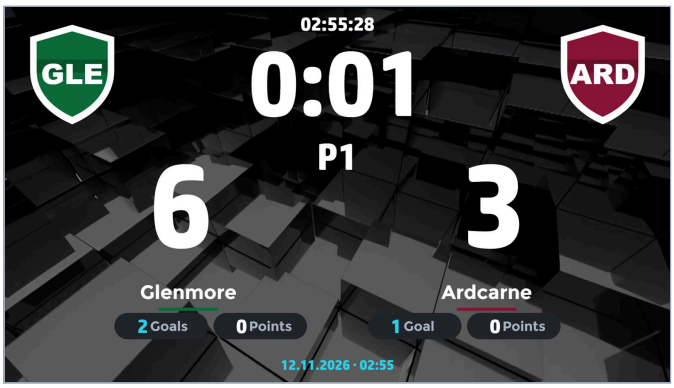


Figure 179. St – Standard (LED) board: logos, total score, the goals and points of each team, clock and period



Figure 180. St with Player Panels (Player Panels in the bottom bar of the Game page): both team lists with the points of each player

The other St screens. Event graphics (goal, card, substitution, team list, officials) go back to the game board after the **Seconds on Air** set on the Info page; Intro, Result, Announce stay until you click **Game** in the St row.

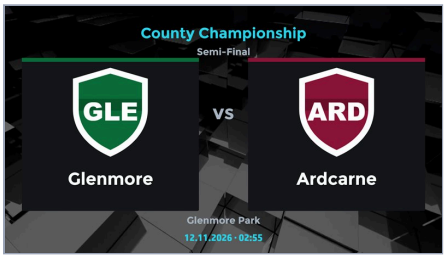


Figure 181. Intro – both teams with logos, the event name, the venue and the date; click Intro in the St row of the Game page before the match.

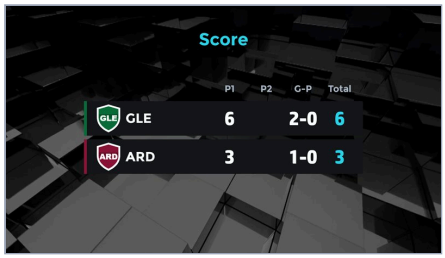


Figure 182. Result – the score of each period and the total; click Result in the St row at half-time and after the final whistle.

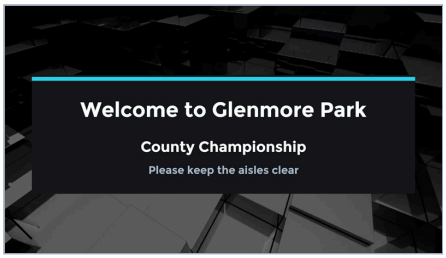


Figure 183. Announce – the title and three lines from the Info page or the Screens page; Show on the Announce row (or Announce in the St row).

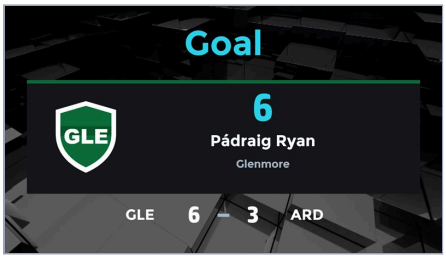


Figure 184. Score graphic – scorer, team and new score; the title is the score type chosen on the Goal row (Goal, Point, Two-Pointer).

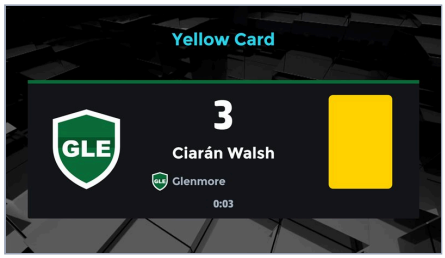


Figure 185. Card – player, team, minute and the card; Show on the Cards row of the Info page.

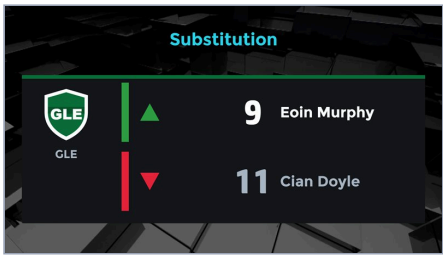


Figure 186. Substitution – player in (▲) and out (▼); Show on the Substitution row of the Info page.

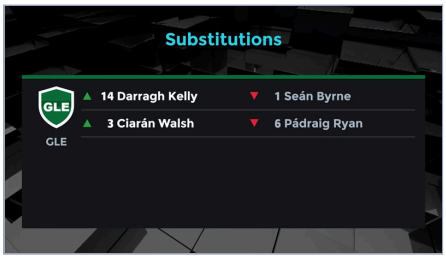


Figure 187. Substitutions – up to five pairs of one team; Show on the Multiple Substitution row.

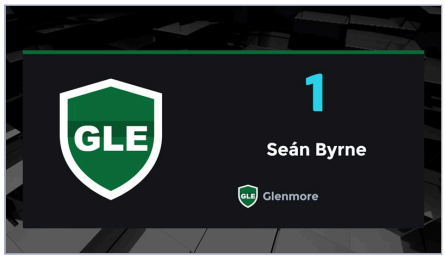


Figure 188. Player Intro – one player on the whole board; Player Intro row, or Slide on the Team Lists row.

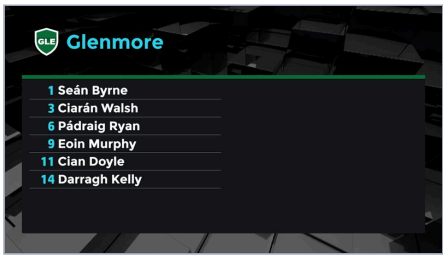


Figure 189. Team List – the players marked Show with numbers and the coach; a team button on the Team Lists row.

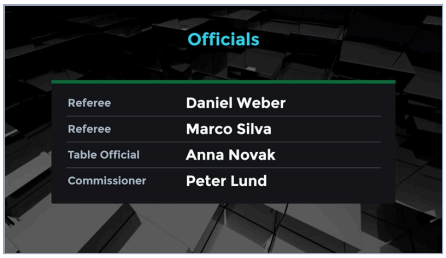


Figure 190. Officials – up to four roles and names; Show on the Officials row.

Remote Control for Gaelic Football

The remote page builds itself from the actions of the running discipline (see Remote Control for connecting a phone or tablet). For Gaelic Football it looks like this:

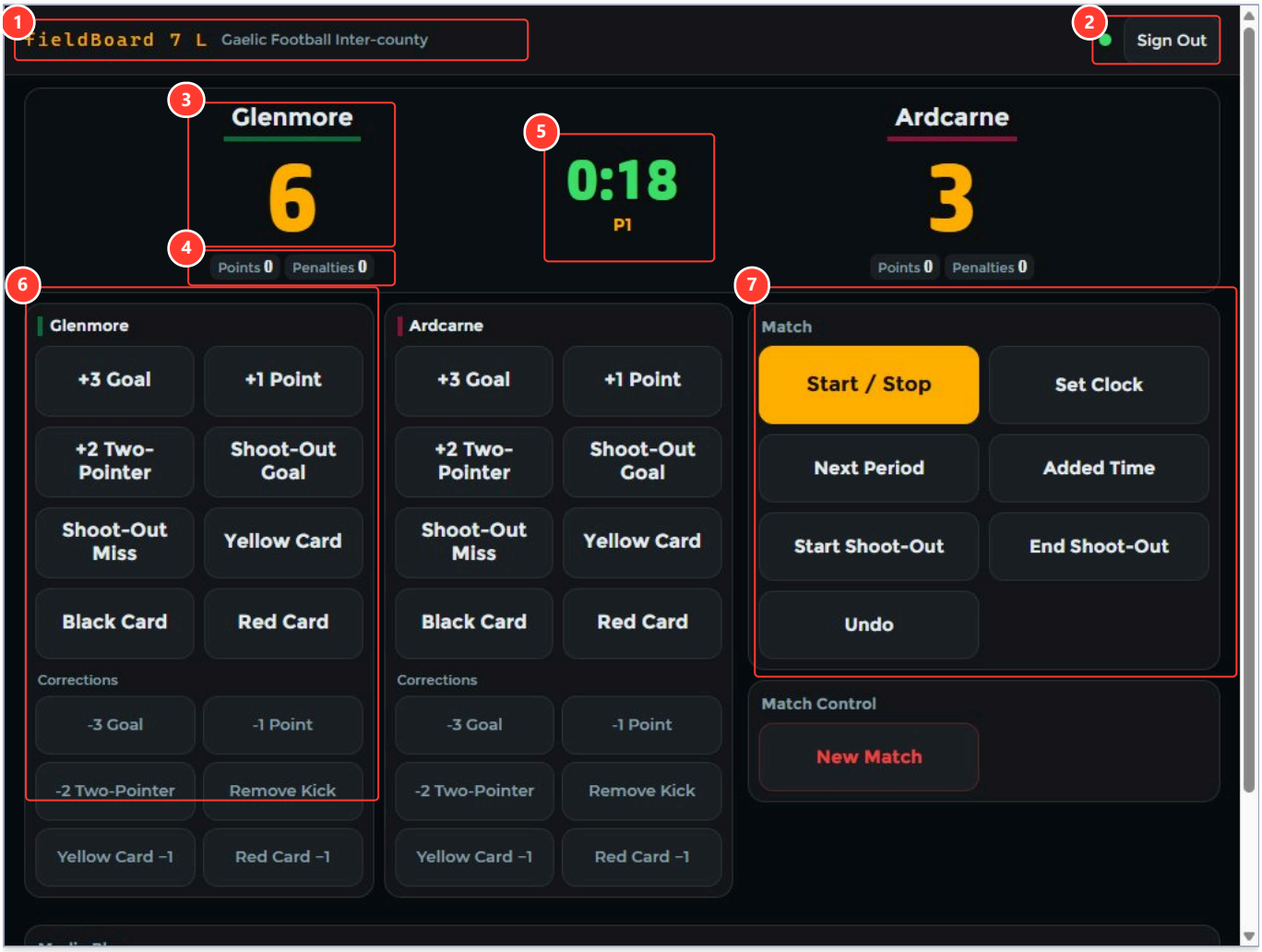


Figure 191. The remote on a tablet (Gaelic Football)

#	Control	What it does
1	**Product Name · Sport**	The program name (fieldBoard 7 L) and the running sport or discipline (the discipline alone when its name already contains the sport, e.g. *Rugby Union*). When the operator changes the sport or starts a new match on the PC, the page rebuilds its buttons by itself. The texts of the page follow the language of the program.
2	**Connection Dot / Sign Out**	Green = connected to the scoreboard. **Sign Out** ends the session after a confirmation.

#	Control	What it does
3	**Team Name and Score**	Name (underlined in the team colour; a long name takes two lines) and score of each team, updated several times a second.
4	**Chips**	**Points** – the points part of the goals-points score; **Penalties** – running black-card sin bins.
5	**Clock and Period**	The game clock (green while it runs) and the period.
6	**Team Section (Home)**	The actions of one team as large buttons (scores, shoot-out kicks and cards); the guest section is next to it. Below them, the **Corrections** take the last entry of a type back. A score button shows its value once (*+1 Goal*, *-1 Goal*); long captions wrap at a word.
7	**Match Section**	Actions that belong to the match: Start / Stop, Set Clock, Next Period, Added Time, Start Shoot-Out / End Shoot-Out, Undo. **Start / Stop** is the large amber button.

Section	Button	What it does
Team (once per team)	+3 Goal / +1 Point / +2 Two-Pointer	Adds that score.
	Shoot-Out Goal / Shoot-Out Miss	A penalty of the shoot-out.
	Yellow Card	Counts a yellow card.
	Black Card	Starts a 10-minute sin bin for the team.
	Red Card	Counts a red card.
Corrections (per team)	-3 Goal / -1 Point / -2 Two-Pointer	Takes a score back.
	Remove Kick	Removes the last shoot-out mark.
	Yellow Card −1 / Red Card −1	Takes a card back.
Match	Start / Stop	Starts or stops the clock.
	Set Clock	Asks for the time.
	Next Period	Next half or extra-time period.
	Added Time	Asks for the announced minutes.
	Start Shoot-Out / End Shoot-Out	Starts or ends the shoot-out.
	Undo	Takes the last action back.
Match Control	New Match	Asks "New Match? This cannot be undone from the remote." – **Yes** resets the match like New Match on the PC.

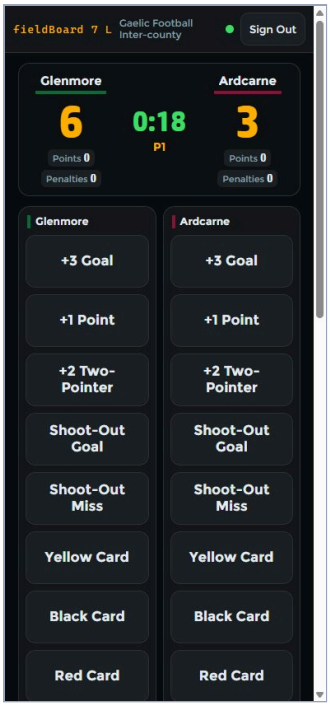


Figure 192. Phone: score bar and the team sections (two columns)

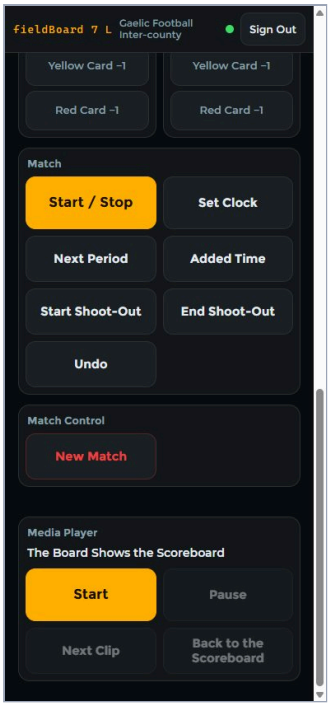


Figure 193. Phone, scrolled down: Corrections, Match and Match Control

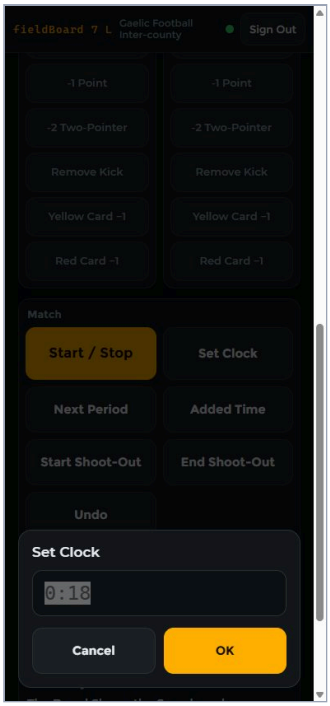


Figure 194. Phone: Set Clock opens a value sheet with the current time (mm:ss); OK sends it

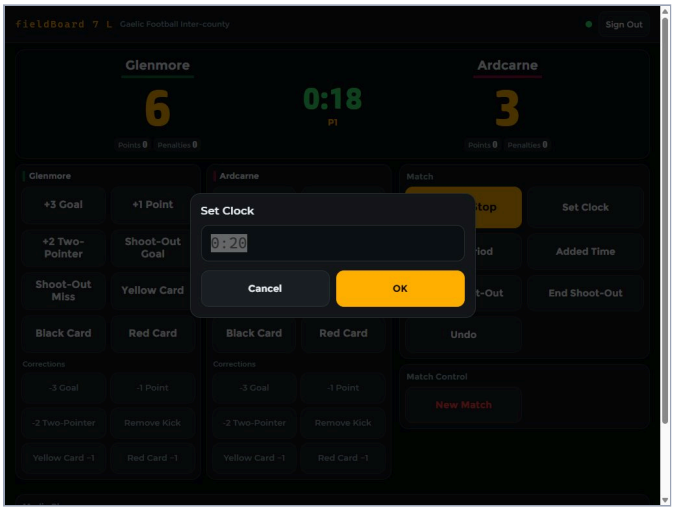


Figure 195. Tablet: the value sheet of Set Clock – type the time and tap OK, or Cancel

Scenarios

1. Start the clock at the throw-in.
2. Home scores a point: click the green **P1**; a goal: green **G3**. The panel shows e.g. "1-3" and the total 6.
3. A two-pointer from outside the arc: click the green **TP2** – the points part goes up by 2.
4. A guest player gets a black card: type the number in the guest box and click **B10**. The 10-minute sin-bin timer starts.
5. When the referee indicates added time, click **+ Added Time**. At 35:00 the clock holds and the added time counts on.
6. At half-time click **Second Half**; the period scores under the buttons show the first-half score.

1. Pick **Gaelic Football ▸ Gaelic Football Club**; the halves are 30:00.
2. Level at full time: click **Extra Time - 1** (10 minutes), then the same button again for Extra Time - 2.

3. Still level: click **Shoot-Out**. For each penalty click ● **Shoot-Out Goal** or ○ **Shoot-Out Miss** of the team.
4. After five each (or a decided sudden-death pair) further kicks are refused; click **Shoot-Out** to end and show **Result**.

21 Hurling and Camogie

The **Hurling** preset has two halves of 35:00, the **Camogie** preset two halves of 30:00. Both count up with added time, have two 10-minute periods of extra time (E1, E2; buttons **Extra Time - 1** / **- 2**) and a penalty shoot-out (**Shoot-Out** button, PEN on the boards; best of 5 then sudden death). Scores are shown as goals-points ("2-14") and as a total.

Preset	Scores	Cards
Hurling	Goal 3 (G3), Point 1 (P1)	Yellow (counted), Black Card 10 min (B10), Red (counted)
Camogie	Goal 3, Point 1	Yellow and Red (both counted, no sin bin)

The Game Panel

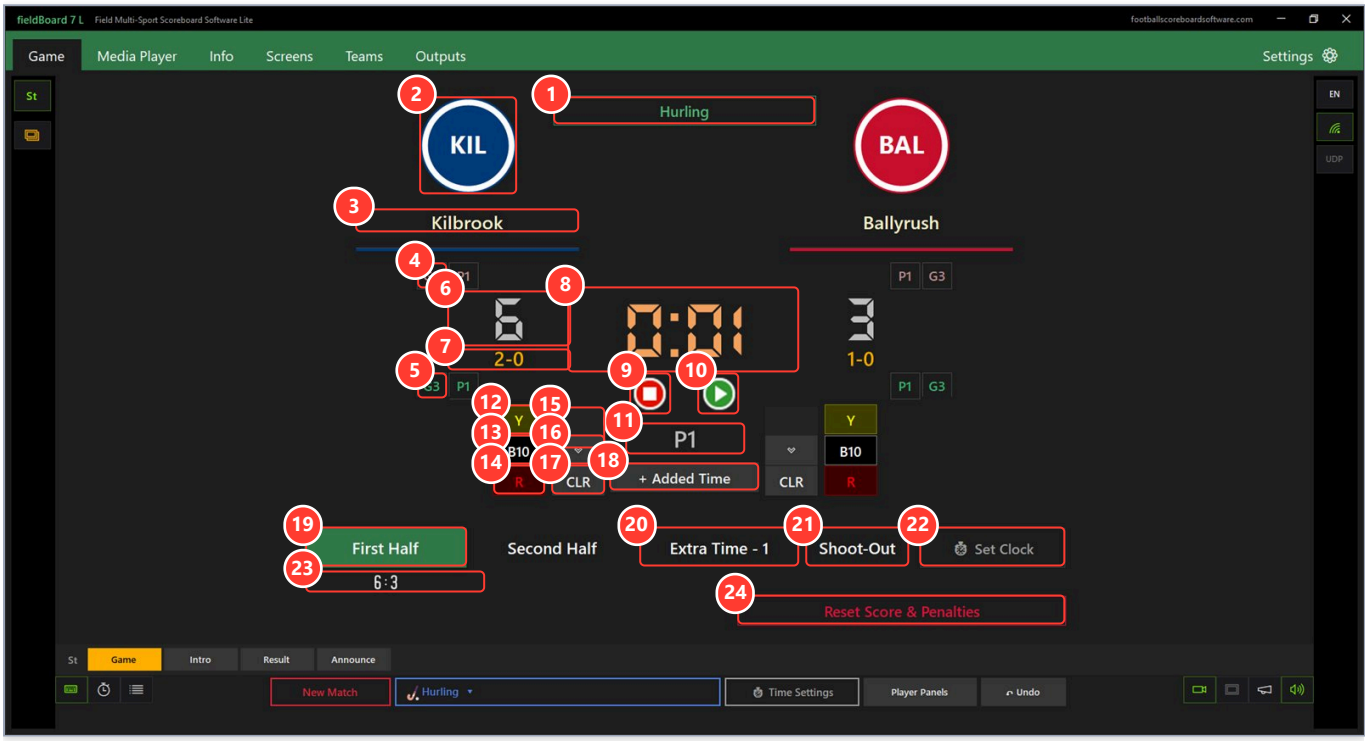


Figure 196. The Game page with the Hurling preset

#	Control	What it does
1	**Discipline Button**	Shows the running rule preset. Click it to open the sport picker and change the sport or the discipline (the sport button in the bottom bar does the same). See Choosing the Sport and Discipline.
2	**Team Logo (Home)**	The home team's logo, or its short name in the team colour when there is no logo. Logos are set on the Teams page; the guest logo sits on the right.
3	**Team Name Box (Home)**	Type a new name and press `Enter` (or click elsewhere) to save it to the team setup; the boards follow at once. The coloured line under the name is the team colour from the Teams page.
4	**Score Buttons, Top Row (Home)**	Take one score of that type back (− G3 Goal, P1 Point). The button is refused when the team has no such score.

#	Control	What it does
5	**Score Buttons, Bottom Row (Home)**	Add one score of that type (+ G3 Goal, P1 Point); the number in the caption is its value. With a number in the player box the points are credited to that player. The guest buttons on the right are mirrored.
6	**Total Score (Home)**	The total in points.
7	**Goals-Points (Home)**	The GAA score as goals-points ("2-0"); the large digits above show the total. Two-pointers count in the points part.
8	**Game Clock**	The game clock. It is white when stopped and lit while it runs. **Double-click** it to type the time (m:ss or m:ss.t), the same as Set Clock.
9	**Stop**	Stops the game clock (`F1` toggles start / stop).
10	**Start**	Starts the game clock. In a sport without added time it refuses to start when the period has run out (go to the next period first); during a shoot-out the clock cannot be started.
11	**Period Name**	The name of the running period (P1, P2, E1 …) as the boards show it.
12	**Y – Yellow Card (Home)**	Counts a yellow card. Right-click takes one back.
13	**B10 – Black Card (Home)**	Starts a 10-minute sin-bin timer. For club hurling without the black card you simply do not use it.
14	**R – Red Card (Home)**	Counts a red card. Right-click takes one back.
15	**Player Number Box (Home)**	Type a shirt number (up to three letters or digits) before you press a card or score button: the action is credited to that player and the box clears. Leave it empty for a team-only entry.
16	**Player List ▾ (Home)**	Opens the team list (number and name) from the Teams page; pick a player to fill the number box, or **—** to clear it. **Other Player…** asks for "number name" (see the player list below).
17	**CLR (Home)**	Clears the player number box without doing anything else.
18	**+ Added Time**	Asks for the announced added time in minutes (empty or 0 = none). The board shows it as "+3"; once the clock has reached the end of the period it shows the time played on, e.g. "+1:24 (+3)".
19	**First Half / Second Half**	Go to that half (clock at 0:00 or 35:00, stopped).
20	**Extra Time - 1 / Extra Time - 2**	Starts extra time (E1 on the boards); click again for Extra Time - 2.
21	**Shoot-Out**	Starts or ends the penalty shoot-out (tool tip *Penalty Shoot-Out*).
22	**Set Clock**	Asks for the time on the clock (m:ss or m:ss.t). Type the time as it is shown, e.g. *62:30* in the second half of a count-up clock. Setting the clock also clears the added time already played.
23	**Period Scores**	The score of each regular period under its button ("10 : 5"), filled in as the periods are played.
24	**Reset Score & Penalties**	After a confirmation, starts the match afresh: scores, period scores, cards, sin bins, shoot-out and clock go back to the start of the first period. Team names and lists stay.

The Camogie panel is the same without the B10 button (camogie has no sin bin).

Player Number and Player List

Scores and cards can be credited to a player. Type the shirt number in the team's number box, or click the ▾ under it:

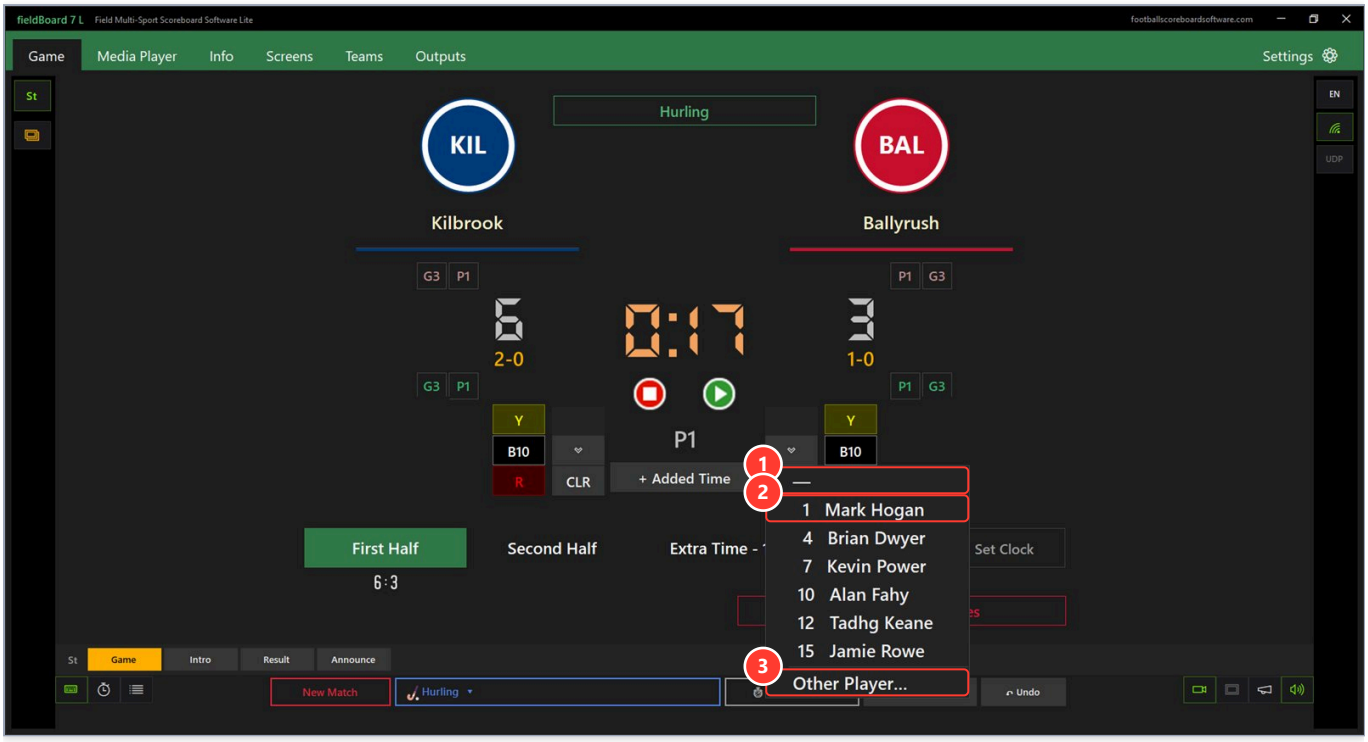


Figure 197. The player list under the home number box (Hurling)

#	Control	What it does
1	—	Clears the number box: the next card or score counts for the team only.
2	**Players (Number · Name)**	The team list of the Teams page, sorted by number; the ticked one is the number in the box. Click a player to put the number into the box – it is used by the next score or card button of that team and then cleared.
3	**Other Player...**	Opens the Other Player dialog below: type a number and a name for a player who is not in the list.

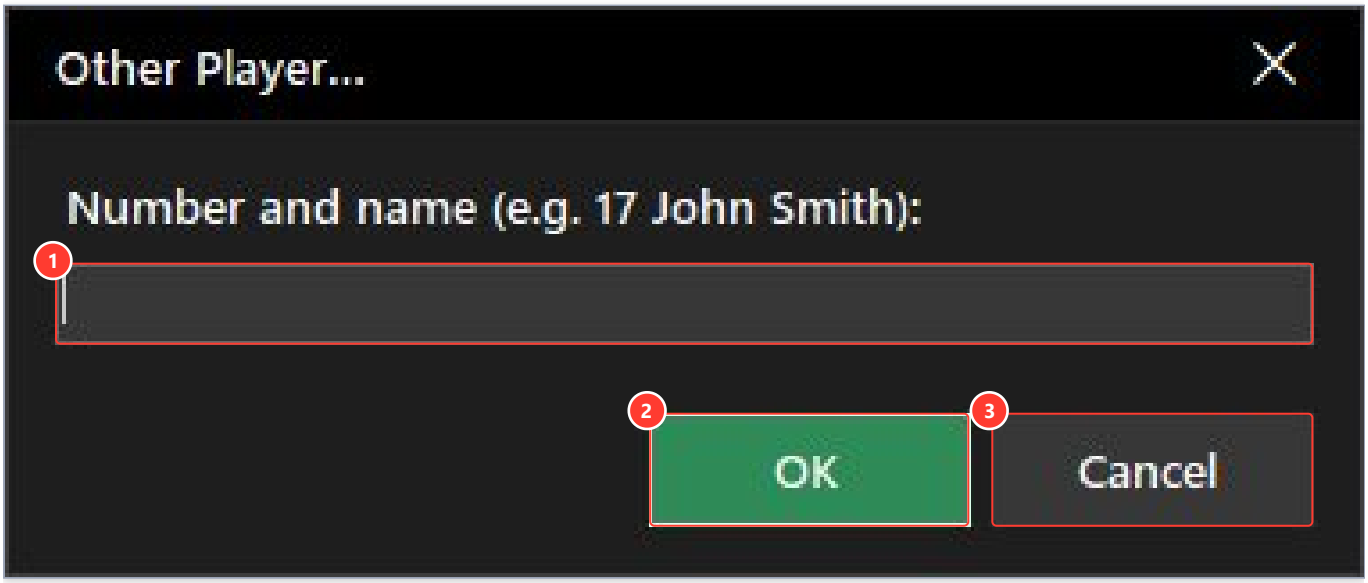


Figure 198. Other Player...

#	Control	What it does
1	**Number and Name**	Type the shirt number, optionally followed by the name: *17 John Smith*, *17 - John Smith*, *#17* or just *17*. Without a number nothing happens.
2	**OK**	Puts the number into the number box; a player with a name that is not in the team list yet is added to it (and appears in later menus and team lists). `Enter` does the same.
3	**Cancel**	Closes the dialog and changes nothing (also `Esc` or the × in the title bar).

> **Tip** The number box clears after each credited action, so a wrong number never sticks to the next entry. Players added with Other Player… are saved in the team list of Hurling.

Dialogs of the Panel

The panel opens these dialogs. Each one is modal: finish it with OK / Save or close it with Cancel (`Esc`).

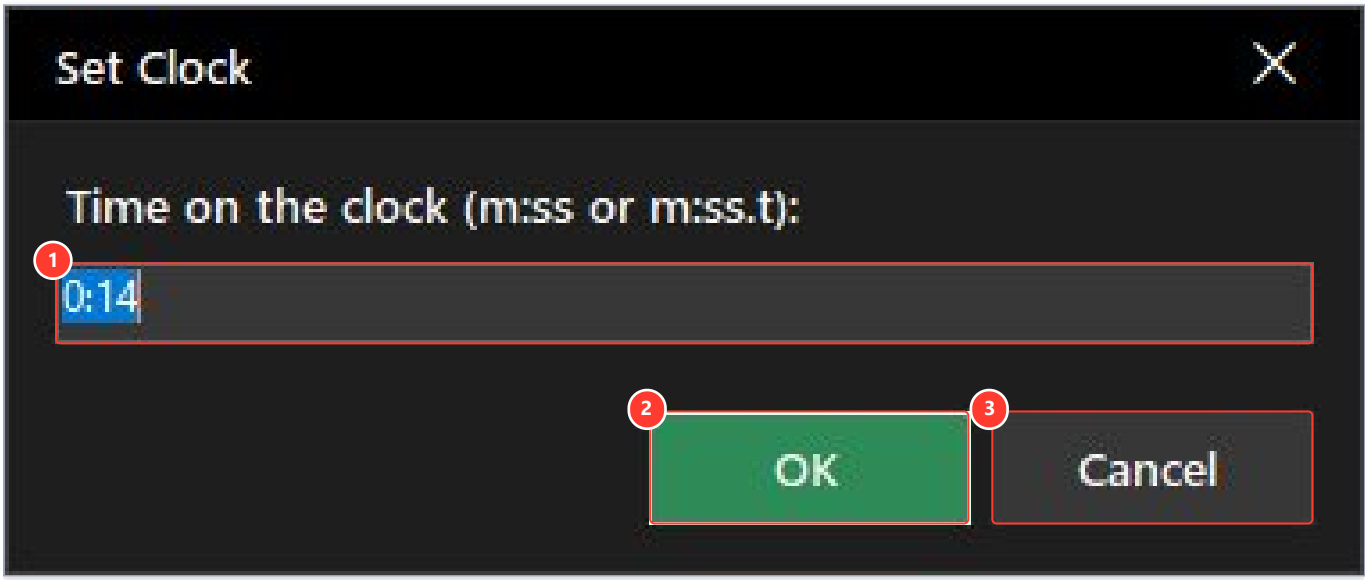


Figure 199. Set Clock (also: double-click the game clock)

#	Control	What it does
1	**Time on the Clock**	Type the time as the clock should show it (m:ss or m:ss.t; plain seconds work too). In the second half type the running time, e.g. *51:20*.
2	**OK**	Sets the clock; a time outside the running period is refused. `Enter` does the same.
3	**Cancel**	Closes the dialog and changes nothing (also `Esc` or the × in the title bar).

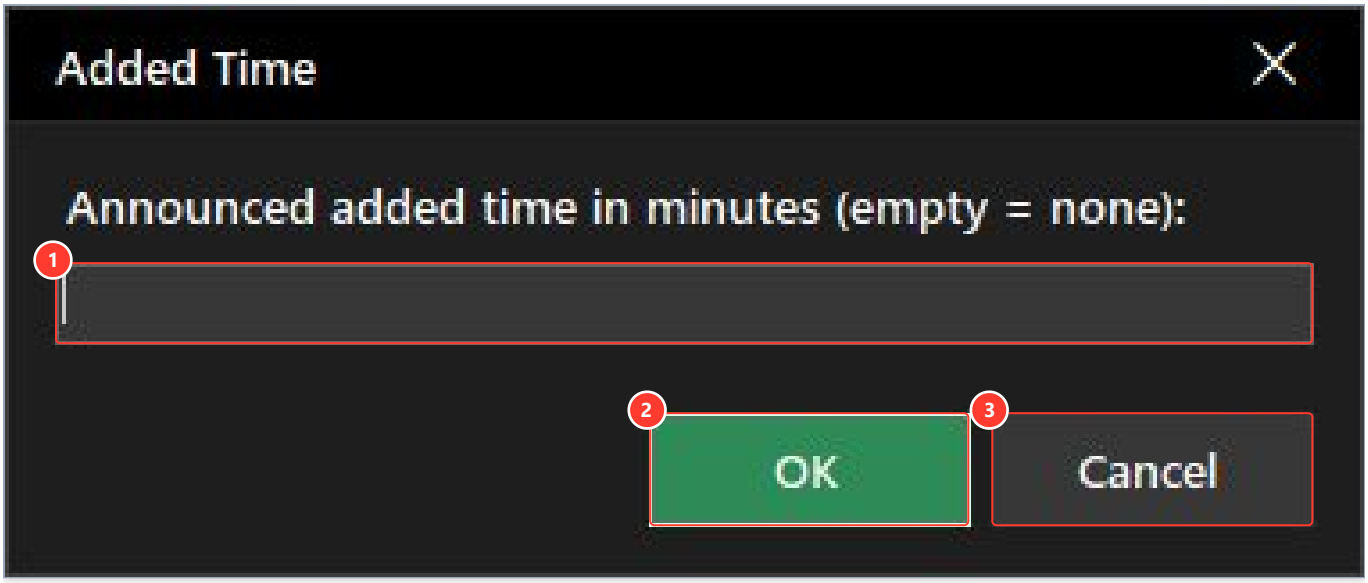


Figure 200. Added Time

#	Control	What it does
1	Minutes	The added time the officials announce, in whole minutes (0–99, "+3" is accepted). Empty or 0 removes the announcement.
2	OK	Shows "+N" next to the clock and on the boards; going to another period clears it. `Enter` does the same.
3	Cancel	Closes the dialog and changes nothing (also `Esc` or the × in the title bar).

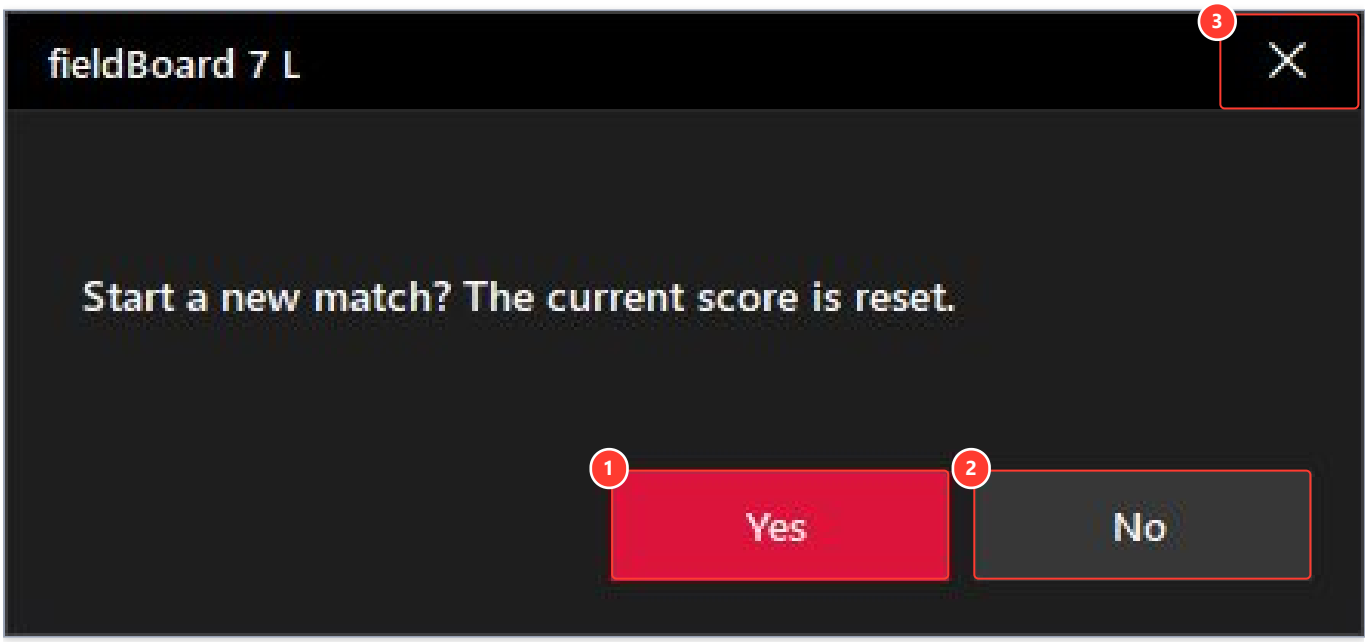


Figure 201. Confirmation of Reset Score & Penalties

#	Control	What it does
1	Yes	Starts a new match of the same discipline: score, period scores, cards, sin bins, shoot-out and clocks are reset; teams and team lists stay. (Undo can still take it back.)
2	No	Keeps the running match.
3	Close (×)	The same as No.

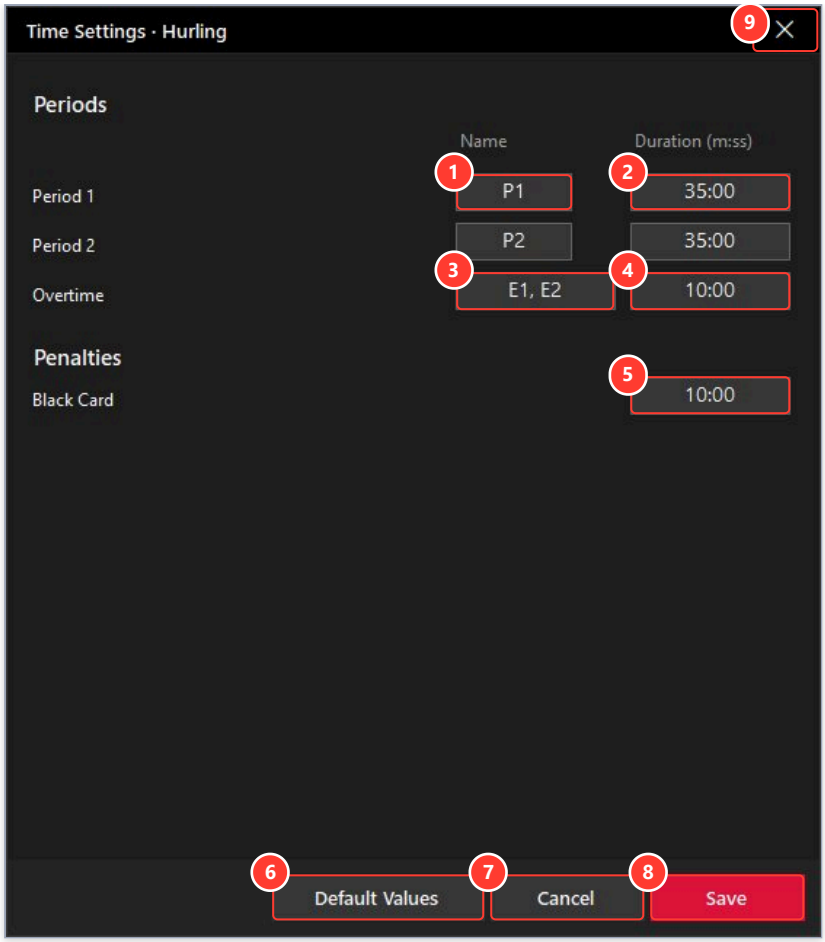


Figure 202. Time Settings · Hurling

#	Control	What it does
1	**Period Names**	Names of the halves (P1, P2).
2	**Half Durations**	Length of each half (35:00); e.g. 30:00 for club or underage games.
3	**Extra-Time Names**	The names of the extra-time periods, separated by commas.
4	**Extra-Time Duration**	Length of each extra-time period.
5	**Black Card**	Sin-bin time of the black card.
6	**Default Values**	Puts the factory times of the discipline back into the fields after a confirmation. Nothing is saved until you click Save.
7	**Cancel**	Closes the dialog without saving; when you changed a field it asks first whether to discard the changes.
8	**Save**	Checks and saves the times for this discipline (an invalid value is reported in red and nothing is saved). If a match is in progress you are asked whether to start a new match with the new times now.
9	**Close (×)**	The same as Cancel.

Sport picker. The discipline button above the clock and the sport button in the bottom bar open the sport picker (shown for every sport in Choosing the Sport and Discipline). The disciplines of this sport: **Hurling** – 2 × 35 minutes with the black card. **Camogie** – 2 × 30 minutes, cards counted only. A running match asks before it switches.

Keyboard shortcuts. The keyboard icon at the bottom left of the Game page opens the shortcut editor with the actions of Hurling (its picture is in Keyboard Shortcuts). The default keys of this sport:

Key	Default action in this sport
`F1`	Start / Stop the game clock
`F2`	Next Period
`F12`	Undo
`Num 7` / `Num 9`	+3 Goal home / guest
`Num 4` / `Num 6`	+1 Point home / guest
`Num 0` / `Num ,`	Take back Goal home / guest
`Num /` / `Num *`	Take back Point home / guest
`Num 2`	Horn

Info Page and Screens

The Info, Screens and Teams pages of every sport are shown in The Info Page, The Screens Page and Teams and Players. With Hurling the Info page has these rows: **Announce**, **Goal** (with the score type: Goal or Point), **Cards** (Yellow Card, Black Card or Red Card), **Red Card** (dots that set 0–4 red cards per team), **Player Intro**, **Substitution**, **Multiple Substitution**, **Team Lists**, **Officials**, **Info Screens** (Intro, Result and Announce).

The Screens page lists the St screens of Hurling – Game, Intro, Result, Announce, Goal, Card, Substitution, Substitutions, Player Intro, Team List and Officials. Its Player Panels columns for Hurling are No, Name, Points, Penalties.

The player box of each Info page row drops the team list of the chosen team:

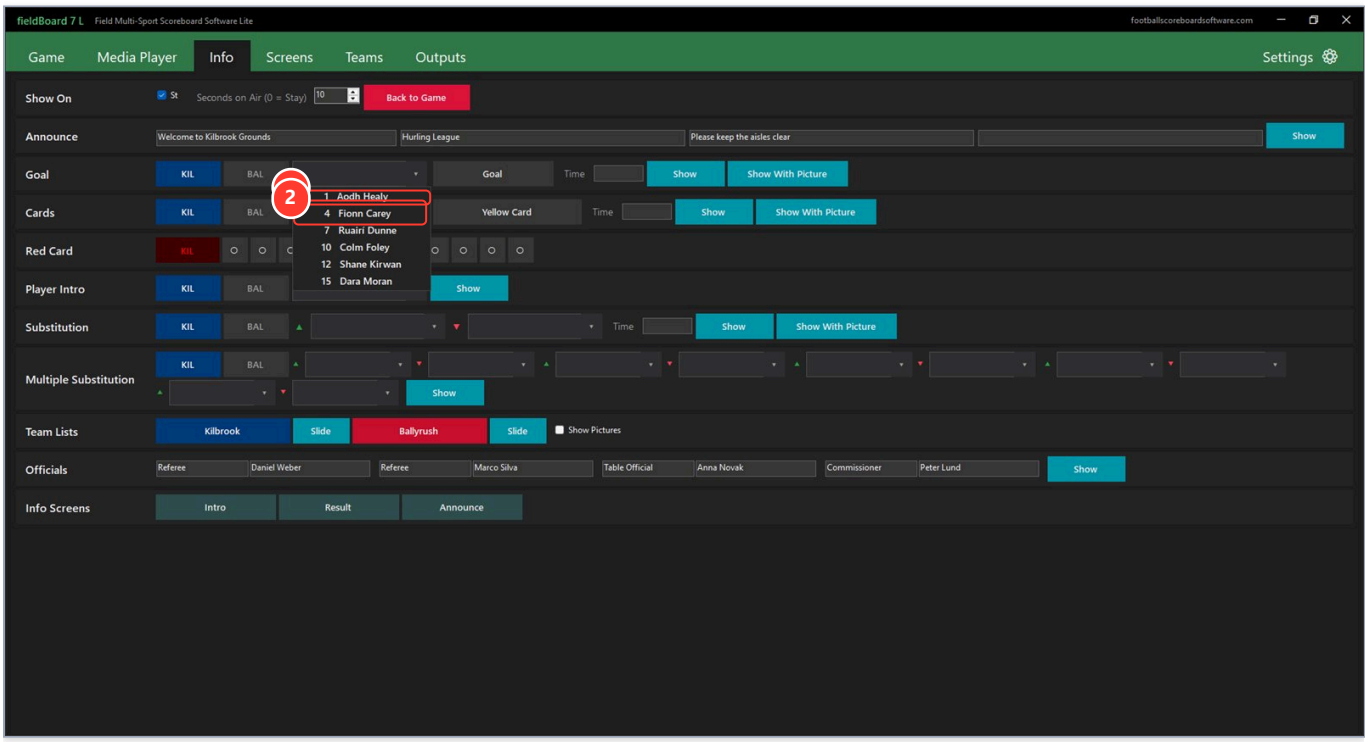


Figure 203. The player list of the Info page (Hurling)

#	Control	What it does
1	**Players (Number · Name)**	The players of the chosen team from the Teams page, sorted by number. Click one to put "number name" into the player box; you can still edit the text before you click Show. Without a team list the menu only says that you can type the number and name.
2	**Player Box**	The box the list belongs to; the ▾ at its right edge opens the list (also `Alt` + `↓` or `F4`).

> **Tip** Scoring on the Game page does not put a graphic on air by itself – use the Goal, Cards and Substitution rows of the Info page for that, so the operator decides what the spectators see.

Outputs of Hurling

The board of Hurling (see Outputs and Sending the Board to the LED Screen for the monitor and the area):

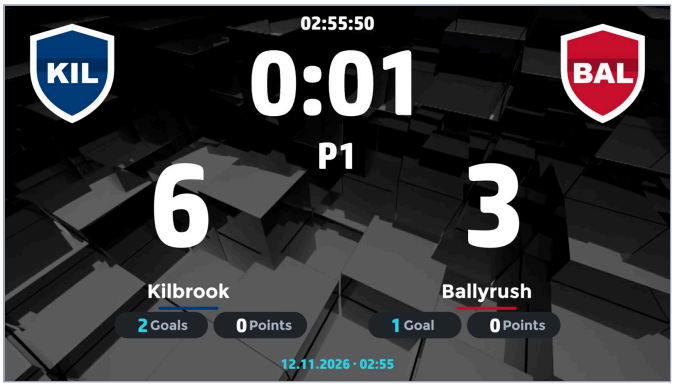


Figure 204. St – Standard (LED) board: logos, total score, goals and points of each team, clock and period

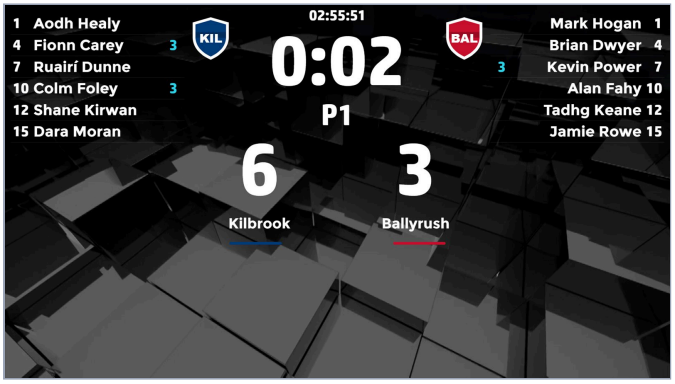


Figure 205. St with Player Panels (Player Panels in the bottom bar of the Game page): both team lists with the points of each player

The other St screens. Event graphics (goal, card, substitution, team list, officials) go back to the game board after the **Seconds on Air** set on the Info page; Intro, Result, Announce stay until you click **Game** in the St row.



Figure 206. Intro – both teams with logos, the event name, the venue and the date; click Intro in the St row of the Game page before the match.

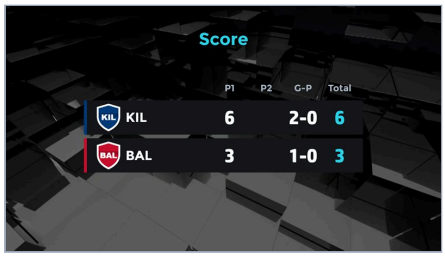


Figure 207. Result – the score of each period and the total; click Result in the St row at half-time and after the final whistle.

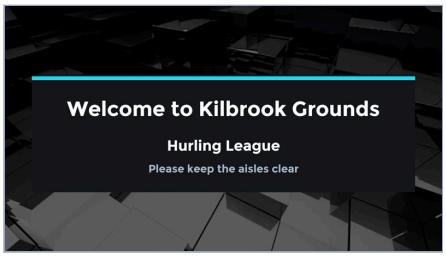


Figure 208. Announce – the title and three lines from the Info page or the Screens page; Show on the Announce row (or Announce in the St row).



Figure 209. Score graphic – scorer, team and new score; the title is Goal or Point as chosen on the Goal row.

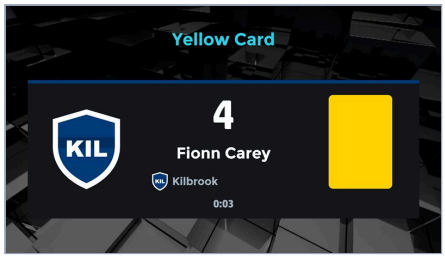


Figure 210. Card – player, team, minute and the card; Show on the Cards row of the Info page.

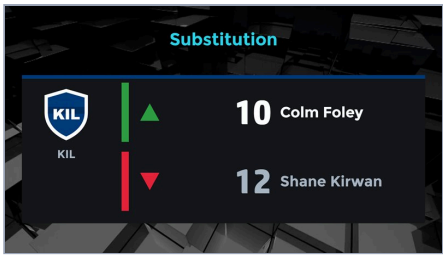


Figure 211. Substitution – player in (▲) and out (▼); Show on the Substitution row of the Info page.

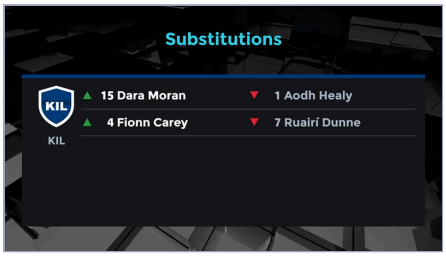


Figure 212. Substitutions – up to five pairs of one team; Show on the Multiple Substitution row.



Figure 213. Player Intro – one player on the whole board; Player Intro row, or Slide on the Team Lists row.



Figure 214. Team List – the players marked Show with numbers and the coach; a team button on the Team Lists row.

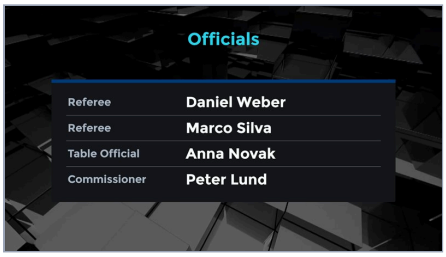


Figure 215. Officials – up to four roles and names; Show on the Officials row.

Remote Control for Hurling

The remote page builds itself from the actions of the running discipline (see Remote Control for connecting a phone or tablet). For Hurling it looks like this:

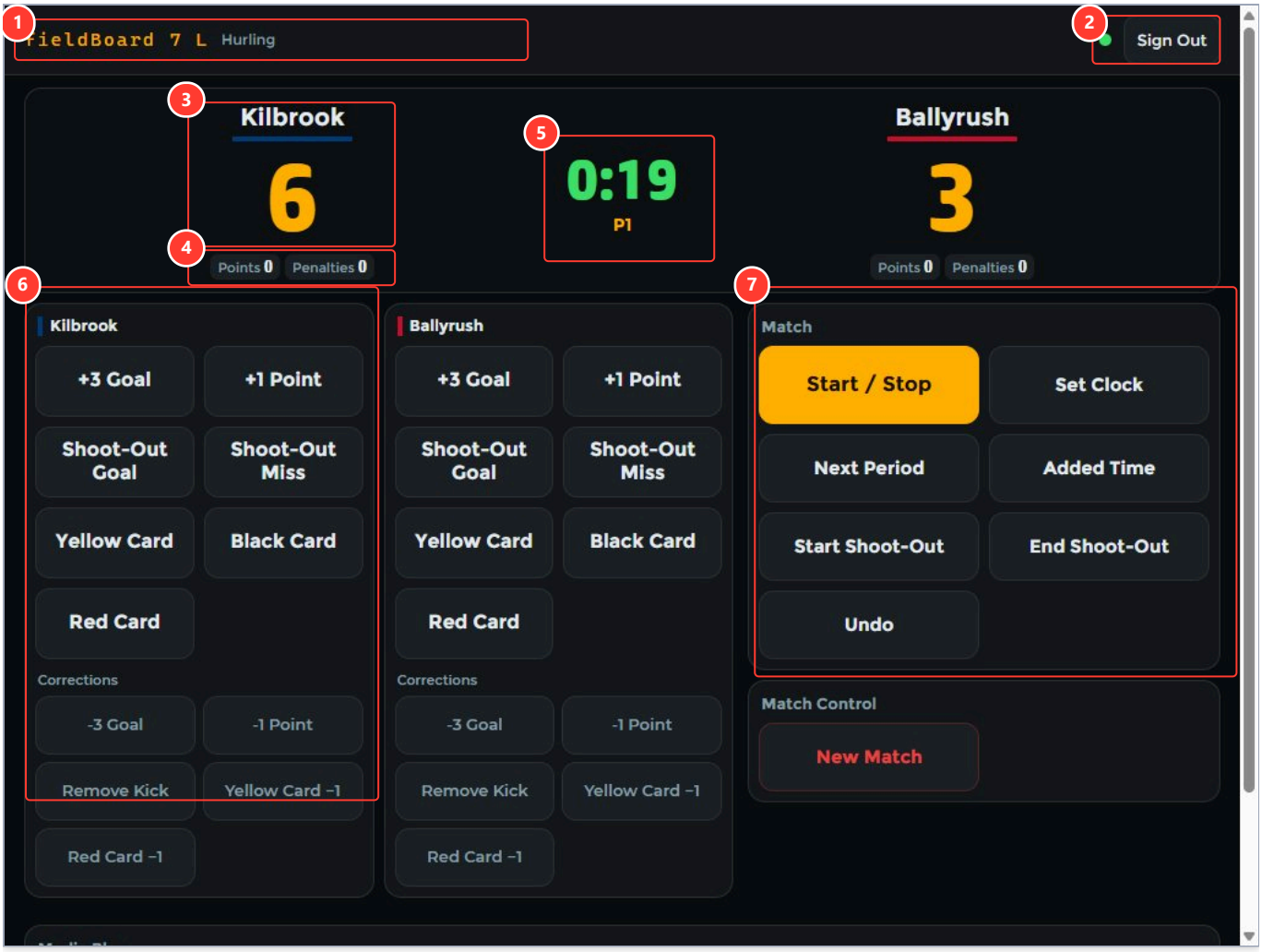


Figure 216. The remote on a tablet (Hurling)

#	Control	What it does
1	Product Name · Sport	The program name (fieldBoard 7 L) and the running sport or discipline (the discipline alone when its name already contains the sport, e.g. *Rugby Union*). When the operator changes the sport or starts a new match on the PC, the page rebuilds its buttons by itself. The texts of the page follow the language of the program.
2	Connection Dot / Sign Out	Green = connected to the scoreboard. **Sign Out** ends the session after a confirmation.
3	Team Name and Score	Name (underlined in the team colour; a long name takes two lines) and score of each team, updated several times a second.
4	Chips	**Points** – the points part of the score; **Penalties** – running black-card sin bins.
5	Clock and Period	The game clock (green while it runs) and the period.
6	Team Section (Home)	The actions of one team as large buttons (scores, shoot-out kicks and cards); the guest section is next to it. Below them, the **Corrections** take the last entry of a type back. A score button shows its value once (*+1 Goal*, *-1 Goal*); long captions wrap at a word.
7	Match Section	Actions that belong to the match: Start / Stop, Set Clock, Next Period, Added Time, Start Shoot-Out / End Shoot-Out, Undo. **Start / Stop** is the large amber button.

Section	Button	What it does
Team (once per team)	+3 Goal / +1 Point	Adds that score.
	Shoot-Out Goal / Shoot-Out Miss	A penalty of the shoot-out.
	Yellow Card / Black Card / Red Card	Counts the card; the black card starts a 10-minute sin bin.
Corrections (per team)	-3 Goal / -1 Point	Takes a score back.
	Remove Kick	Removes the last shoot-out mark.
	Yellow Card −1 / Red Card −1	Takes a card back.
Match	Start / Stop	Starts or stops the clock.
	Set Clock	Asks for the time.
	Next Period	Next half or extra-time period.
	Added Time	Asks for the announced minutes.
	Start Shoot-Out / End Shoot-Out	Starts or ends the shoot-out.
	Undo	Takes the last action back.
Match Control	New Match	Asks "New Match? This cannot be undone from the remote." – **Yes** resets the match like New Match on the PC.

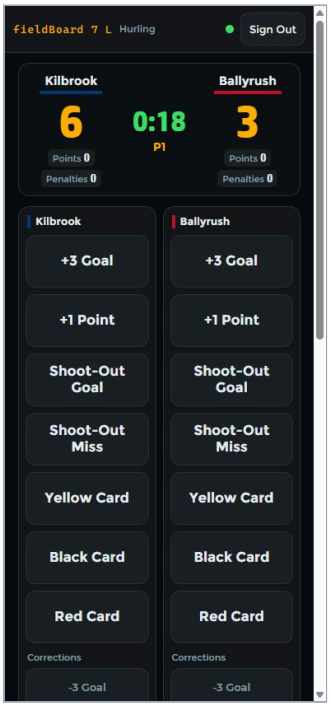


Figure 217. Phone: score bar and the team sections (two columns)

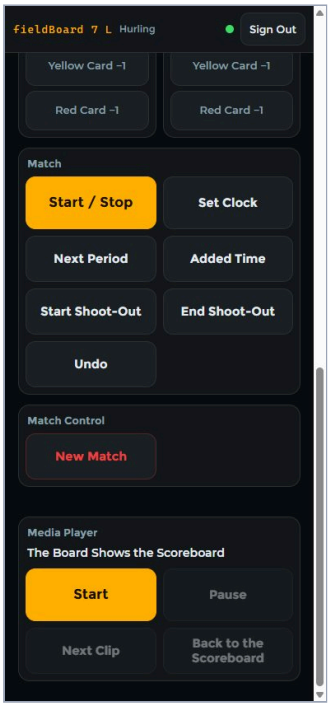


Figure 218. Phone, scrolled down: Corrections, Match and Match Control

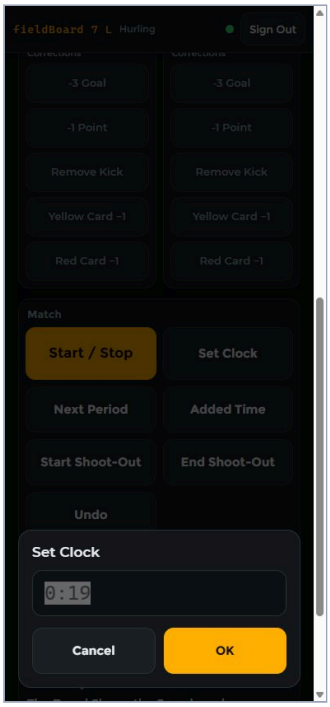


Figure 219. Phone: Set Clock opens a value sheet with the current time (mm:ss); OK sends it

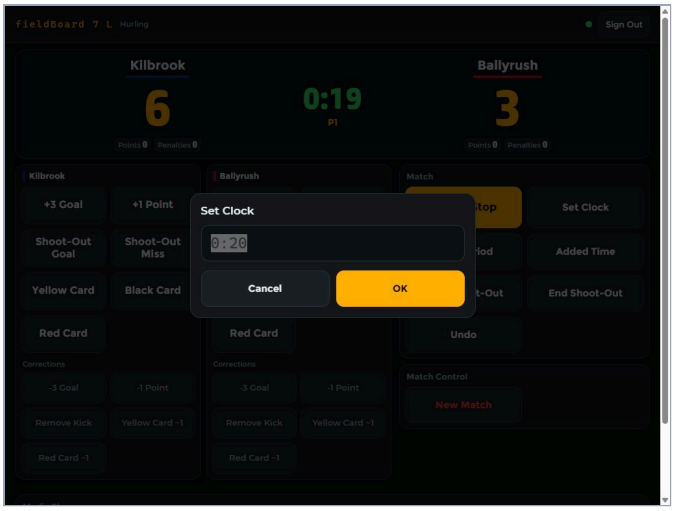


Figure 220. Tablet: the value sheet of Set Clock – type the time and tap OK, or Cancel

Scenarios

1. Start the clock at the throw-in. Points come thick and fast: click the green **P1** of the team each time (or press `Num 4` / `Num 6`).
2. A goal: click the green **G3** (`Num 7` / `Num 9`). The panel shows e.g. "1-09" with the total 12.
3. A home player is black-carded: type the number and click **B10**; the 10-minute timer appears in the panel and on the board.
4. Added time at 34:00: click **+ Added Time** and type *2*. At 35:00 the clock holds and counts the added time.
5. At half-time click **Second Half** and show the **Result** screen with the half-time score.

1. Pick **Hurling ▸ Camogie**. Open **Time Settings**, type 20:00 for both halves and click **Save**.
2. Enter the teams on the Teams page or type the names into the name boxes of the Game page.
3. Score with **G3** and **P1**; yellow and red cards are counted with **Y** and **R**.
4. For the next match of the day click **New Match**; the 20-minute halves stay saved for Camogie.

22 Field Hockey

The **Field Hockey** preset has four quarters of 15:00 on a count-down clock and a shoot-out (**Shoot-Out** button, SO on the boards; five attempts each, then sudden death). There is no overtime period.

Rule	As implemented
Clock	Counts down from 15:00 in each quarter and **stops automatically when a goal is scored** (restart it at the centre pass).
Score	Goal = 1.
Cards	Green card 2 min (G2), Yellow card 5 min (Y5), Yellow card 10 min (Y10) – timed suspensions; Red (R) is counted. A goal does not end a suspension.
Shoot-out	Shoot-Out button (SO on the boards): best of 5 per team, then sudden death.

> **Note** Penalty corners and video referrals are not counted by the scoreboard.

The Game Panel



Figure 221. The Game page with the Field Hockey preset

#	Control	What it does
1	**Discipline Button**	Shows the running rule preset. Click it to open the sport picker and change the sport or the discipline (the sport button in the bottom bar does the same). See Choosing the Sport and Discipline.
2	**Team Logo (Home)**	The home team's logo, or its short name in the team colour when there is no logo. Logos are set on the Teams page; the guest logo sits on the right.

#	Control	What it does
3	**Team Name Box (Home)**	Type a new name and press `Enter` (or click elsewhere) to save it to the team setup; the boards follow at once. The coloured line under the name is the team colour from the Teams page.
4	**Period Name**	The running quarter (Q1–Q4).
5	**Game Clock**	The game clock. It is white when stopped and lit while it runs. **Double-click** it to type the time (m:ss or m:ss.t), the same as Set Clock.
6	**Stop**	Stops the game clock (`F1` toggles start / stop).
7	**Start**	Starts the game clock. In a sport without added time it refuses to start when the period has run out (go to the next period first); during a shoot-out the clock cannot be started.
8	**↑ Goal (Home)**	Adds a goal, credited to the player in the number box. The clock stops.
9	**↓ Remove Goal (Home)**	Takes a goal back.
10	**Score (Home)**	The team's goals.
11	**G2 – Green Card (Home)**	A 2-minute suspension for the player in the number box: a timer row starts left of the card buttons and on the boards.
12	**Y5 / Y10 – Yellow Card (Home)**	A 5- or 10-minute suspension.
13	**R – Red Card (Home)**	Counts a red card (no timer). Right-click takes one back.
14	**Player Number Box (Home)**	Type a shirt number (up to three letters or digits) before you press a card or score button: the action is credited to that player and the box clears. Leave it empty for a team-only entry.
15	**Player List ▾ (Home)**	Opens the team list (number and name) from the Teams page; pick a player to fill the number box, or **—** to clear it. **Other Player...** asks for "number name" (see the player list below).
16	**Running Suspensions (Home)**	Up to three running suspensions: shirt number, time left and ✕ to remove one early. They run only while the game clock runs.
17	**Quarter Buttons**	Go to that quarter: the clock is set to 15:00 and stops.
18	**Shoot-Out**	Starts the shoot-out (clock stopped, Goal / Miss buttons at the top of the panel, SO on the boards). The button is lit while it runs; click it again to end it.
19	**Set Clock**	Asks for the time on the clock (m:ss or m:ss.t). Type the time as it is shown, e.g. *62:30* in the second half of a count-up clock. Setting the clock also clears the added time already played.
20	**Time Settings**	Opens the Time Settings of this discipline (period lengths, extra time, card and penalty lengths) – see Dialogs of the Panel below.

Player Number and Player List

Scores and cards can be credited to a player. Type the shirt number in the team's number box, or click the ▾ under it:

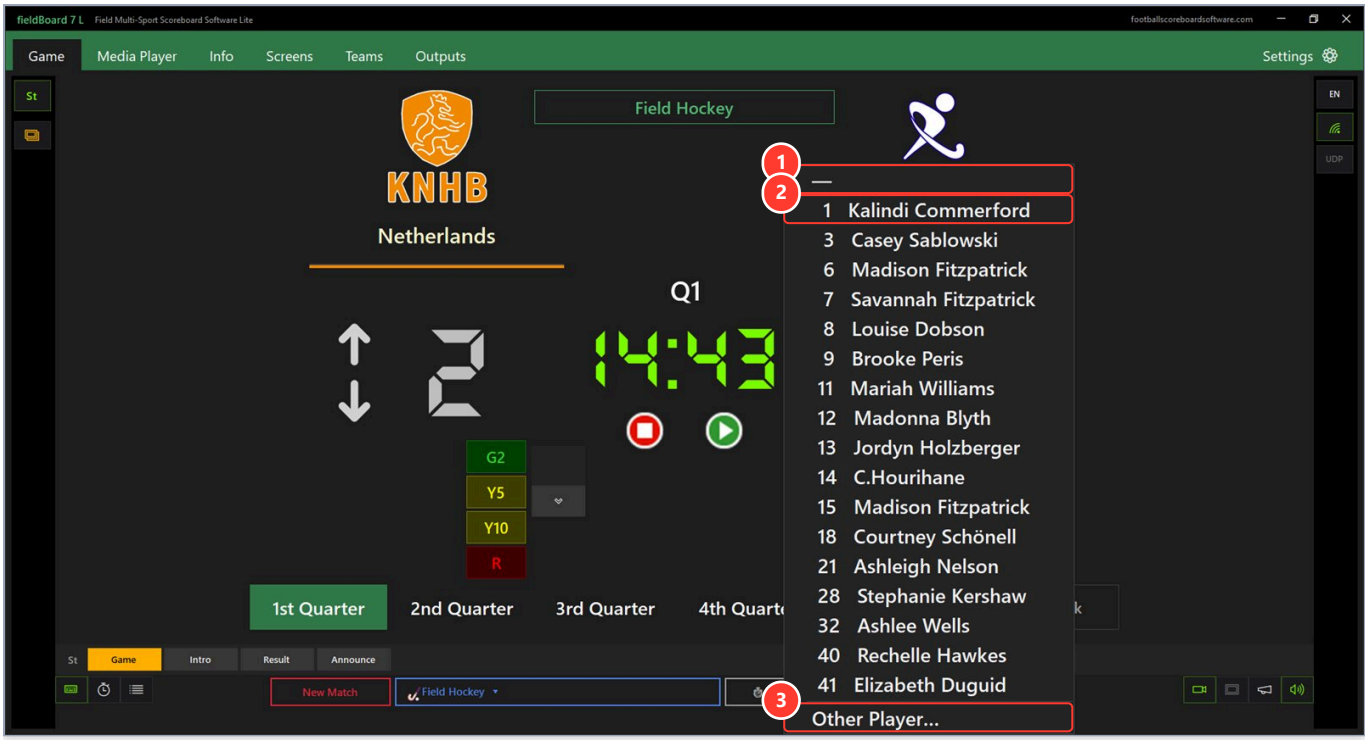


Figure 222. The player list under the home number box (Field Hockey)

#	Control	What it does
1	—	Clears the number box: the next card or score counts for the team only.
2	**Players (Number · Name)**	The team list of the Teams page, sorted by number; the ticked one is the number in the box. Click a player to put the number into the box – it is used by the next score or card button of that team and then cleared.
3	**Other Player...**	Opens the Other Player dialog below: type a number and a name for a player who is not in the list.

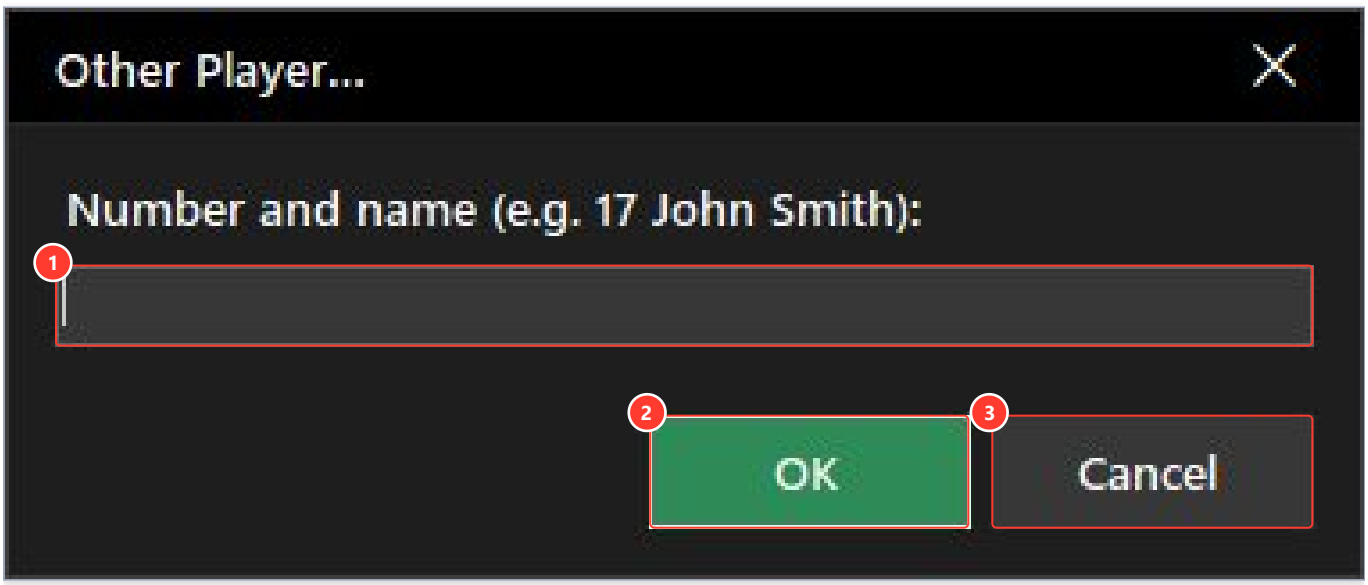


Figure 223. Other Player...

#	Control	What it does
1	**Number and Name**	Type the shirt number, optionally followed by the name: *17 John Smith*, *17 - John Smith*, *#17* or just *17*. Without a number nothing happens.

#	Control	What it does
2	OK	Puts the number into the number box; a player with a name that is not in the team list yet is added to it (and appears in later menus and team lists). `Enter` does the same.
3	Cancel	Closes the dialog and changes nothing (also `Esc` or the × in the title bar).

> **Tip** The number box clears after each credited action, so a wrong number never sticks to the next entry. Players added with Other Player… are saved in the team list of Field Hockey.

Dialogs of the Panel

The panel opens these dialogs. Each one is modal: finish it with OK / Save or close it with Cancel (`Esc`).

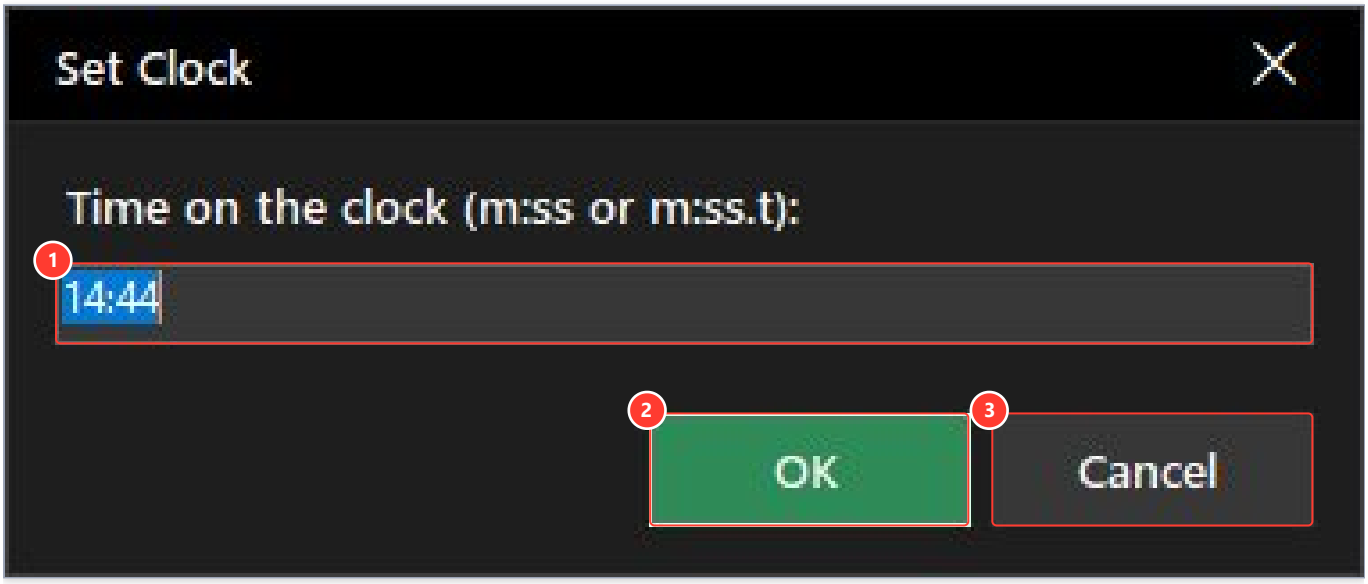


Figure 224. Set Clock (also: double-click the game clock)

#	Control	What it does
1	Time on the Clock	Type the time as the clock should show it (m:ss or m:ss.t; plain seconds work too). The clock counts down: type the time left in the quarter, e.g. *8:12*.
2	OK	Sets the clock; a time outside the running period is refused. `Enter` does the same.
3	Cancel	Closes the dialog and changes nothing (also `Esc` or the × in the title bar).

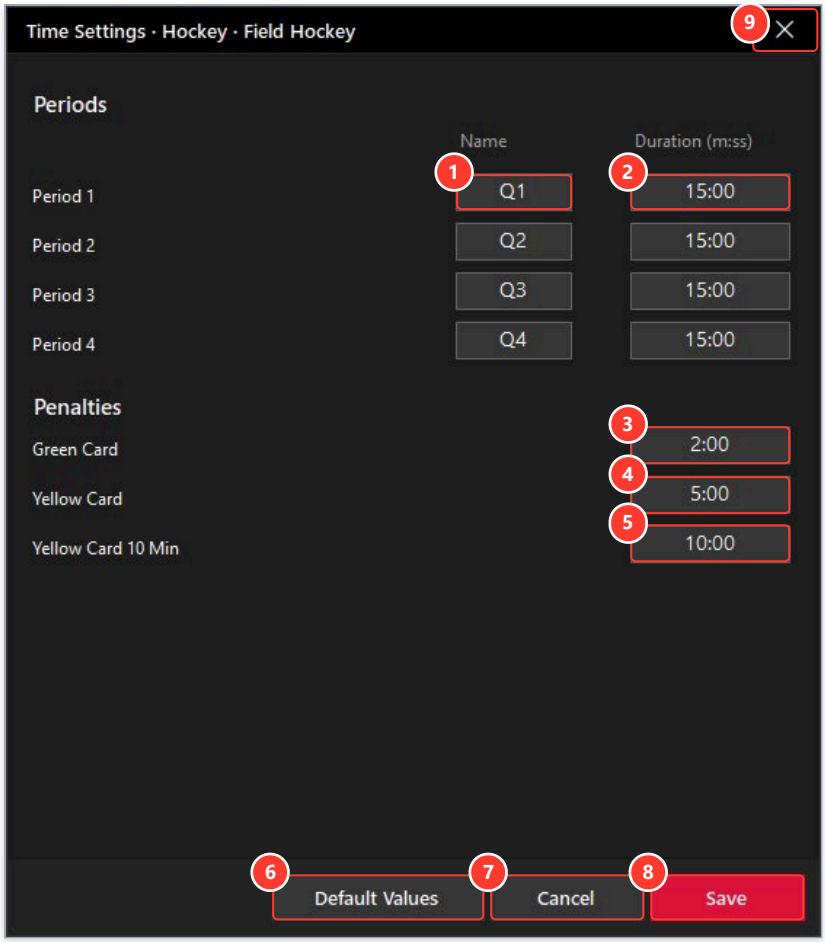


Figure 225. Time Settings · Hockey · Field Hockey

#	Control	What it does
1	**Quarter Names**	Names of the quarters.
2	**Quarter Durations**	Length of each quarter, e.g. 17:30 or 10:00 for youth hockey; type the same value in all four rows.
3	**Green Card**	Suspension time of the green card.
4	**Yellow Card**	Suspension time of the 5-minute yellow card.
5	**Yellow Card 10 Min**	Suspension time of the longer yellow card.
6	**Default Values**	Puts the factory times of the discipline back into the fields after a confirmation. Nothing is saved until you click Save.
7	**Cancel**	Closes the dialog without saving; when you changed a field it asks first whether to discard the changes.
8	**Save**	Checks and saves the times for this discipline (an invalid value is reported in red and nothing is saved). If a match is in progress you are asked whether to start a new match with the new times now.
9	**Close (×)**	The same as Cancel.

Sport picker. The discipline button above the clock and the sport button in the bottom bar open the sport picker (shown for every sport in Choosing the Sport and Discipline). The disciplines of this sport: **Field Hockey** – The only hockey preset of fieldBoard 7 L. A running match asks before it switches.

Keyboard shortcuts. The keyboard icon at the bottom left of the Game page opens the shortcut editor with the actions of Field Hockey (its picture is in Keyboard Shortcuts). The default keys of this sport:

Key	Default action in this sport
`F1`	Start / Stop the game clock
`F2`	Next Period
`F12`	Undo
`Num 7` / `Num 9`	+1 Goal home / guest
`Num 0` / `Num ,`	Take back Goal home / guest
`Num 2`	Horn

Info Page and Screens

The Info, Screens and Teams pages of every sport are shown in The Info Page, The Screens Page and Teams and Players. With Field Hockey the Info page has these rows: **Announce**, **Goal**, **Cards** (Green Card, Yellow Card, Yellow Card 10 Min or Red Card), **Red Card** (dots that set 0–4 red cards per team), **Player Intro**, **Substitution**, **Multiple Substitution**, **Team Lists**, **Officials**, **Info Screens** (Intro, Result and Announce).

The Screens page lists the St screens of Field Hockey – Game, Intro, Result, Announce, Goal, Card, Substitution, Substitutions, Player Intro, Team List and Officials. Its Player Panels columns for Field Hockey are No, Name, Points, Penalties.

The player box of each Info page row drops the team list of the chosen team:

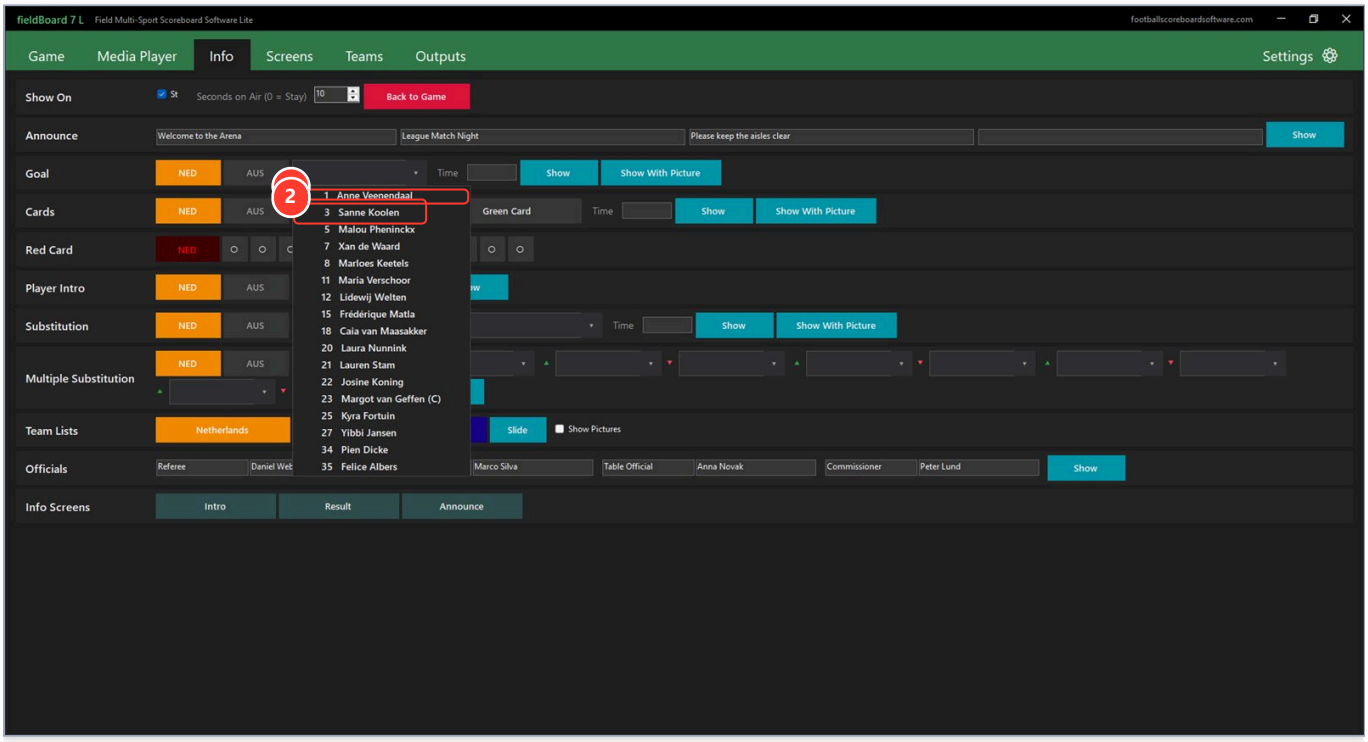


Figure 226. The player list of the Info page (Field Hockey)

#	Control	What it does
1	**Players (Number · Name)**	The players of the chosen team from the Teams page, sorted by number. Click one to put "number name" into the player box; you can still edit the text before you click Show. Without a team list the menu only says that you can type the number and name.
2	**Player Box**	The box the list belongs to; the ▾ at its right edge opens the list (also `Alt` + `↓` or `F4`).

> **Tip** Scoring on the Game page does not put a graphic on air by itself – use the Goal, Cards and Substitution rows of the Info page for that, so the operator decides what the spectators see.

Outputs of Field Hockey

The board of Field Hockey (see Outputs and Sending the Board to the LED Screen for the monitor and the area):

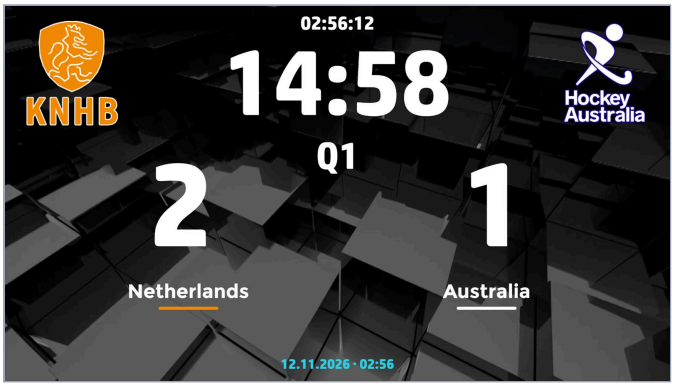


Figure 227. St – Standard (LED) board: logos, score, count-down clock and quarter, the time of day and the date



Figure 228. St with Player Panels (Player Panels in the bottom bar of the Game page): both team lists with the goals of each player

The other St screens. Event graphics (goal, card, substitution, team list, officials) go back to the game board after the **Seconds on Air** set on the Info page; Intro, Result, Announce stay until you click **Game** in the St row.



Figure 229. Intro – both teams with logos, the event name, the venue and the date; click Intro in the St row of the Game page before the match.

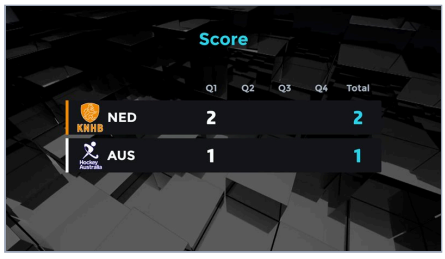


Figure 230. Result – the score of each period and the total; click Result in the St row at half-time and after the final whistle.

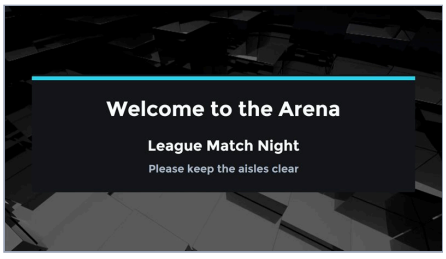


Figure 231. Announce – the title and three lines from the Info page or the Screens page; Show on the Announce row (or Announce in the St row).



Figure 232. Goal – the scorer's number, name, photo and team with the new score; Show on the Goal row of the Info page.

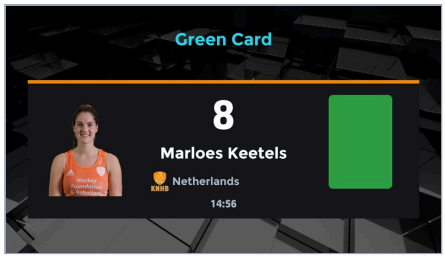


Figure 233. Card – player, team, minute and the card; Show on the Cards row of the Info page.

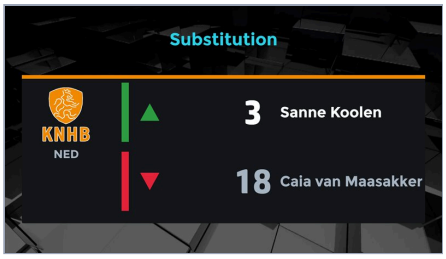


Figure 234. Substitution – player in (▲) and out (▼); Show on the Substitution row of the Info page.

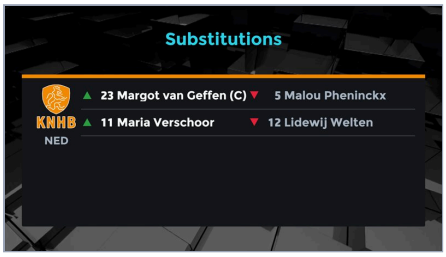


Figure 235. Substitutions – up to five pairs of one team; Show on the Multiple Substitution row.



Figure 236. Player Intro – one player on the whole board; Player Intro row, or Slide on the Team Lists row.



Figure 237. Team List – the players marked Show with numbers and the coach; a team button on the Team Lists row.

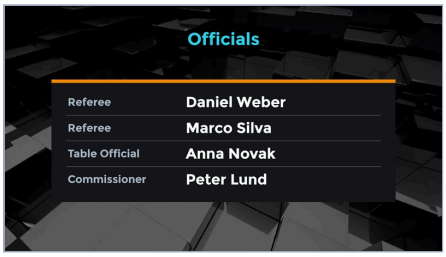


Figure 238. Officials – up to four roles and names; Show on the Officials row.

Remote Control for Field Hockey

The remote page builds itself from the actions of the running discipline (see Remote Control for connecting a phone or tablet). For Field Hockey it looks like this:

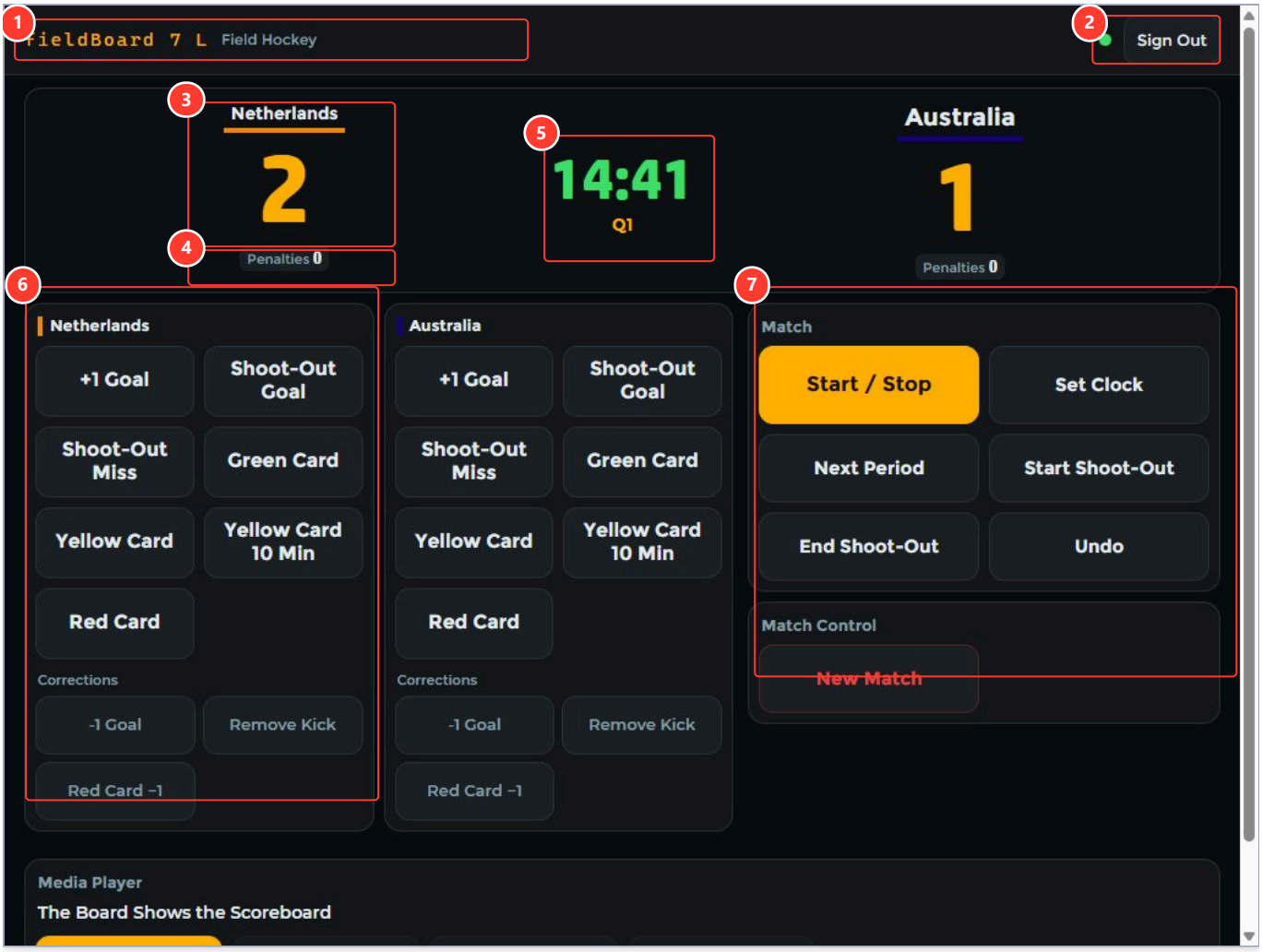


Figure 239. The remote on a tablet (Field Hockey)

#	Control	What it does
1	**Product Name · Sport**	The program name (fieldBoard 7 L) and the running sport or discipline (the discipline alone when its name already contains the sport, e.g. *Rugby Union*). When the operator changes the sport or starts a new match on the PC, the page rebuilds its buttons by itself. The texts of the page follow the language of the program.
2	**Connection Dot / Sign Out**	Green = connected to the scoreboard. **Sign Out** ends the session after a confirmation.
3	**Team Name and Score**	Name (underlined in the team colour; a long name takes two lines) and score of each team, updated several times a second.
4	**Chips**	Running suspensions of the team.
5	**Clock and Period**	The game clock (green while it runs) and the period.
6	**Team Section (Home)**	The actions of one team as large buttons (scores, shoot-out attempts and cards); the guest section is next to it. Below them, the **Corrections** take the last entry of a type back. A score button shows its value once (*+1 Goal*, *-1 Goal*); long captions wrap at a word.
7	**Match Section**	Actions that belong to the match: Start / Stop, Set Clock, Next Period, Start Shoot-Out / End Shoot-Out, Undo. **Start / Stop** is the large amber button.

Section	Button	What it does
Team (once per team)	+1 Goal	Adds a goal (the clock stops).
	Shoot-Out Goal / Shoot-Out Miss	An attempt of the shoot-out.
	Green Card / Yellow Card / Yellow Card 10 Min	Starts a 2-, 5- or 10-minute suspension for the team.
	Red Card	Counts a red card.
Corrections (per team)	-1 Goal	Takes a goal back.
	Remove Kick	Removes the last shoot-out mark.
	Red Card −1	Takes a red card back.
Match	Start / Stop	Starts or stops the clock.
	Set Clock	Asks for the time.
	Next Period	Next quarter.
	Start Shoot-Out / End Shoot-Out	Starts or ends the shoot-out.
	Undo	Takes the last action back.
Match Control	New Match	Asks "New Match? This cannot be undone from the remote." – **Yes** resets the match like New Match on the PC.

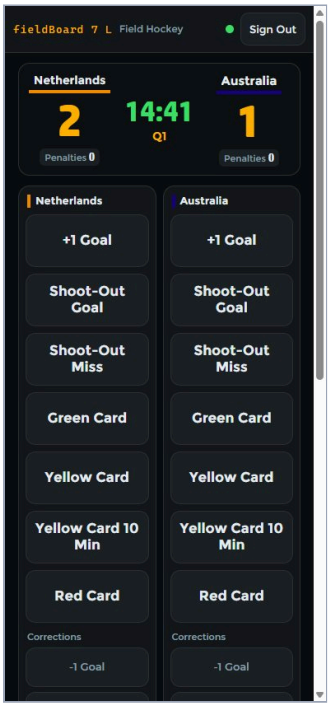


Figure 240. Phone: score bar and the team sections (two columns)

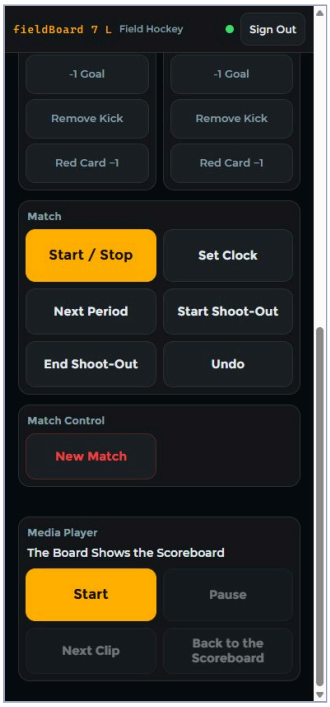


Figure 241. Phone, scrolled down: Corrections, Match and Match Control

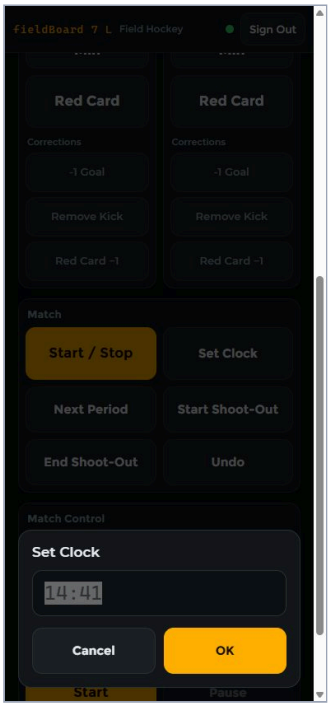


Figure 242. Phone: Set Clock opens a value sheet with the current time (mm:ss); OK sends it

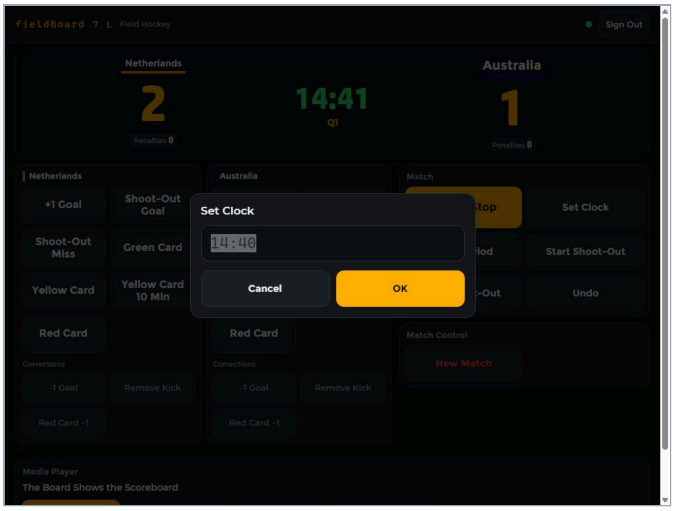


Figure 243. Tablet: the value sheet of Set Clock – type the time and tap OK, or Cancel

Scenarios

1. Start the clock at the push-back; it stops by itself after every goal – restart it at the centre pass.
2. A home player gets a green card: type the number and click **G2**. The 2:00 timer runs with the game clock.
3. At the end of the 4th quarter with a level score click **Shoot-Out**.
4. For each attempt click ● **Shoot-Out Goal** or ○ **Shoot-Out Miss** of the team; the board shows "SO 3 – 2".
5. When the shoot-out is decided, click **Shoot-Out** again to end it.

1. Make sure **Global Shortcuts On** is ticked in the Keyboard Shortcuts editor and NumLock is on.
2. Press `F1` at the push-back to start the clock, again to stop it.
3. A home goal: `Num 7` (guest `Num 9`); the clock stops by itself. A goal disallowed: `Num 0` (guest `Num ,`).
4. At the end of the quarter press `F2` for the next quarter, `F1` to start it.
5. Cards are given with the mouse on the panel (they need the player number).

23 Lacrosse

Lacrosse has three presets, all with four count-down periods, sudden-death overtime periods (as many as needed), a shot clock and timeouts.

Preset	Periods	Overtime	Shot clock	Timeouts	Penalties
Field Lacrosse	4 × 15:00	4:00, sudden death	80 s, reset 60 s, resets on a goal	2 per team per game, 90 s	Technical 0:30, Personal 1:00 / 2:00 (released by a goal), Personal 3:00 NR (non-releasable), Red Card (ejection); at most 3 running per team
Women's Lacrosse	4 × 15:00	3:00, sudden death	90 s, reset 60 s, resets on a goal	2 per game, 2:00	Green 1:00, Yellow 2:00 (released by a goal), Red 5:00, Yellow/Red counted
Lacrosse Sixes	4 × 8:00	3:00, sudden death	30 s	2 per game, 30 s	Minor 0:30, Major 1:00 (released by a goal), 3:00 NR, Yellow and Red counted; at most 2 running

The game clock shows tenths in the last minute of a period and stops on a goal in Field and Women's lacrosse. A releasable penalty ends when the opponent scores while the penalised team is short-handed. Penalties beyond the running limit wait and start when a running one ends. Timeouts not used in regulation can be used in overtime.

The Game Panel

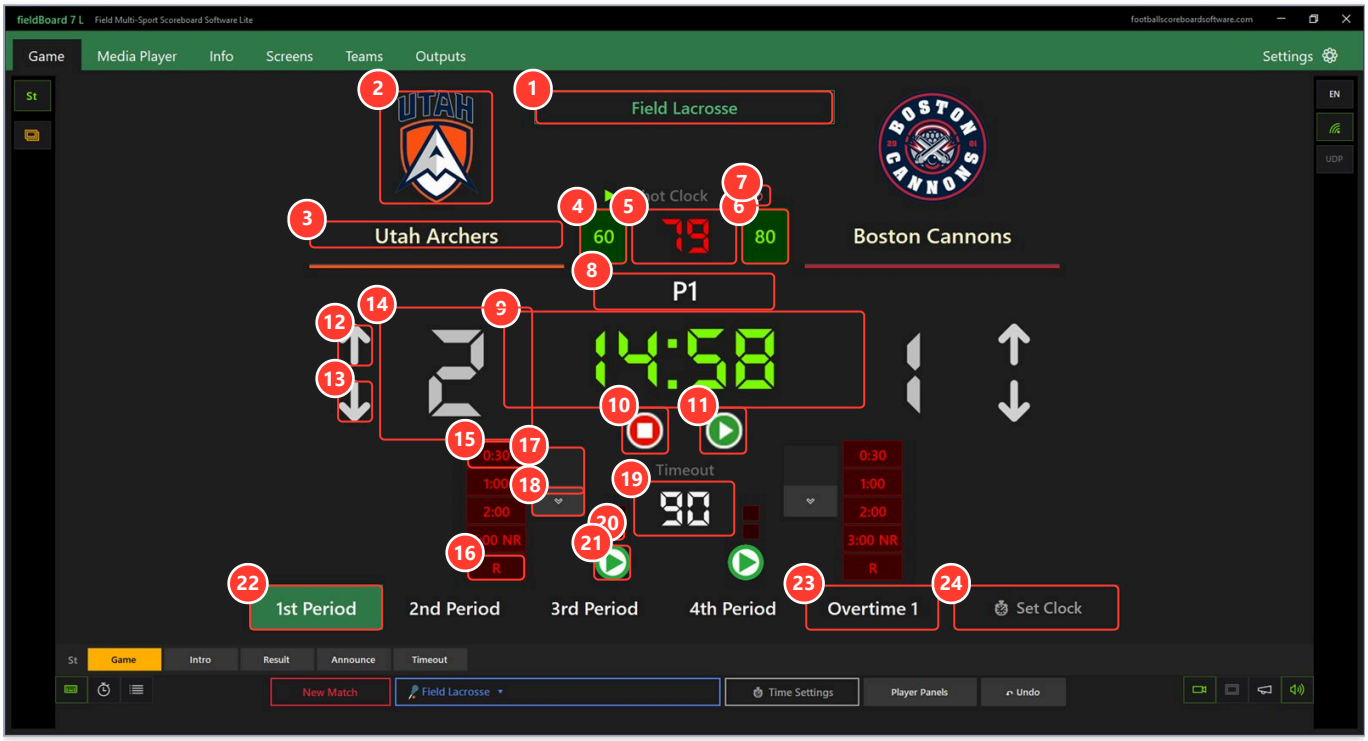


Figure 244. The Game page with the Field Lacrosse preset

#	Control	What it does
1	**Discipline Button**	Shows the running rule preset. Click it to open the sport picker and change the sport or the discipline (the sport button in the bottom bar does the same). See Choosing the Sport and Discipline.

#	Control	What it does
2	**Team Logo (Home)**	The home team's logo, or its short name in the team colour when there is no logo. Logos are set on the Teams page; the guest logo sits on the right.
3	**Team Name Box (Home)**	Type a new name and press `Enter` (or click elsewhere) to save it to the team setup; the boards follow at once. The coloured line under the name is the team colour from the Teams page.
4	**Shot Clock Reset (60)**	Sets the shot clock to the reset value (60 s) and starts it (`F4`).
5	**Shot Clock**	The shot clock (red). It runs with the game clock, shows tenths below 5 s and resets to 80 on a goal. Click the digits to start it again after a stop; **double-click** them to type a value from 0 to the full time, e.g. 7 or 4.5 (the double-click does not start it).
6	**Shot Clock Full (80)**	Sets the shot clock to the full value and starts it (`F3`).
7	**Shot Clock to 0**	Sets the shot clock to 0 and stops it, without the shot-clock buzzer (tool tip *Shot Clock to 0*); the boards show 0. **80** or **60** starts it again.
8	**Period Name**	The running period (P1–P4, OT, OT2 …).
9	**Game Clock**	The game clock. It is white when stopped and lit while it runs. **Double-click** it to type the time (m:ss or m:ss.t), the same as Set Clock.
10	**Stop**	Stops the game clock (`F1` toggles start / stop).
11	**Start**	Starts the game clock. In a sport without added time it refuses to start when the period has run out (go to the next period first); during a shoot-out the clock cannot be started.
12	**↑ Goal (Home)**	Adds a goal, credited to the player in the number box. The game clock stops, the shot clock resets and a releasable penalty of the other team may end.
13	**↓ Remove Goal (Home)**	Takes a goal back.
14	**Score (Home)**	The team's goals.
15	**Penalty Buttons (Home)**	The timed penalties, captioned with their length (each length is its own foul): **0:30** Technical 0:30, **1:00** Personal 1:00, **2:00** Personal 2:00 and **3:00 NR** Personal 3:00 NR (hover a button for the full name; all buttons of a team use one caption size), for the player in the number box. A timer row starts and the boards show it under the **Penalty** heading (the heading appears only while a penalty runs). The **✕** of a timer row removes exactly that penalty.
16	**R – Red Card (Home)**	Counts a red card (ejection) for the team and the player in the number box; no timer. **Right-click** takes one back.
17	**Player Number Box (Home)**	Type a shirt number (up to three letters or digits) before you press a card or score button: the action is credited to that player and the box clears. Leave it empty for a team-only entry.
18	**Player List ▾ (Home)**	Opens the team list (number and name) from the Teams page; pick a player to fill the number box, or **—** to clear it. **Other Player…** asks for "number name" (see the player list below).
19	**Timeout Clock**	Shows the timeout length (90) and counts down while a timeout runs; click it to end the timeout early (`Num 5`).
20	**Timeout Lamps (Home)**	One lamp per timeout; a used one turns red.

#	Control	What it does
21	**Take Timeout (Home)**	Starts a team timeout (`F5`, guest `F6`): the game clock stops and the timeout counts down. The button is lit while the team's timeout runs and disappears when none is left.
22	**Period Buttons**	Go to that period: the clock is set to 15:00, stops, and the shot clock is reset.
23	**Overtime 1 / Overtime 2 …**	Starts the first overtime (OT1 on the boards); while it runs, click it again for Overtime 2, 3 … A goal in overtime stops the clock and ends the match.
24	**Set Clock**	Asks for the time on the clock (m:ss or m:ss.t). Type the time as it is shown, e.g. *62:30* in the second half of a count-up clock. Setting the clock also clears the added time already played.

With **Women's Lacrosse** the penalty buttons are **G1**, **Y2**, **R5** (timed) and **Y/R** (counted); with **Lacrosse Sixes 0:30** (minor), **1:00** (major), **3:00 NR** (timed), **Y** and **R** (counted), and the shot clock has one value: a single **30** button sets and starts it (`F3`).

Player Number and Player List

Scores and cards can be credited to a player. Type the shirt number in the team's number box, or click the ▾ under it:

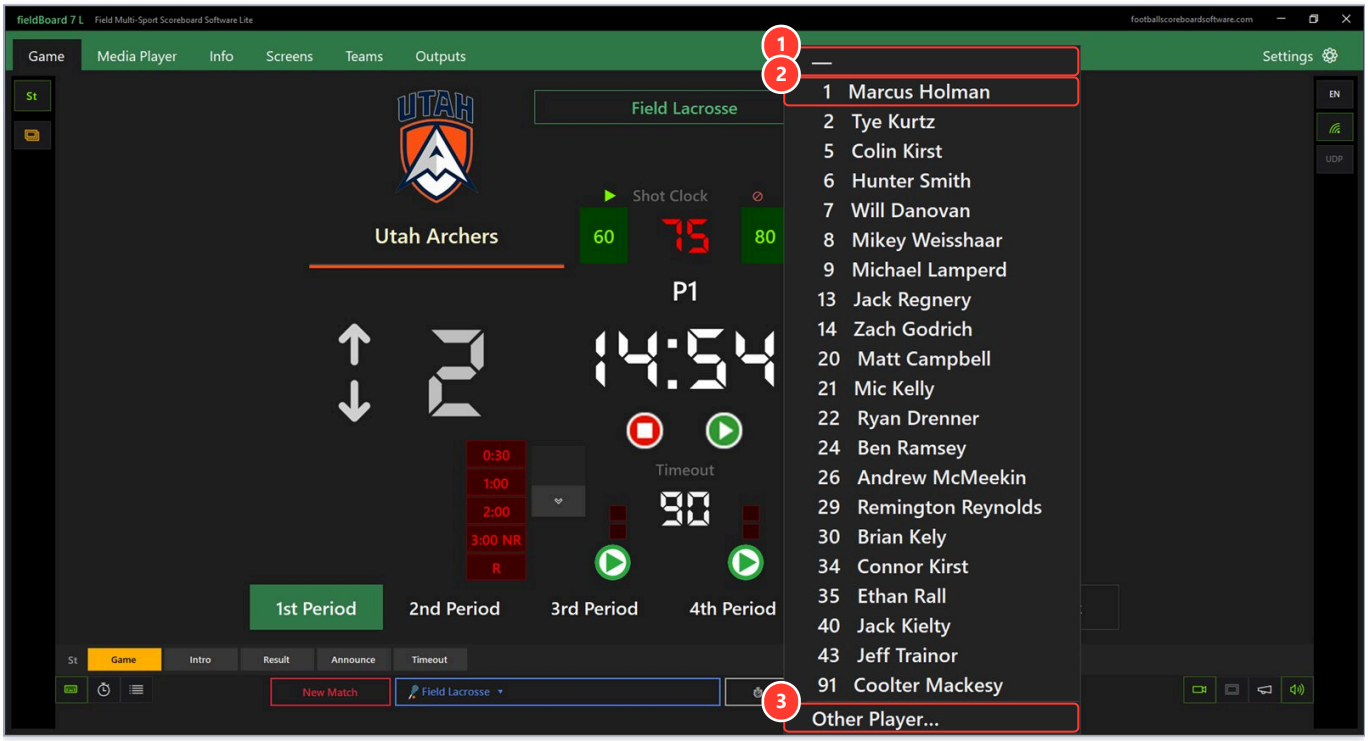


Figure 245. The player list under the home number box (Field Lacrosse)

#	Control	What it does
1	**—**	Clears the number box: the next card or score counts for the team only.
2	**Players (Number · Name)**	The team list of the Teams page, sorted by number; the ticked one is the number in the box. Click a player to put the number into the box – it is used by the next score or card button of that team and then cleared.
3	**Other Player…**	Opens the Other Player dialog below: type a number and a name for a player who is not in the list.

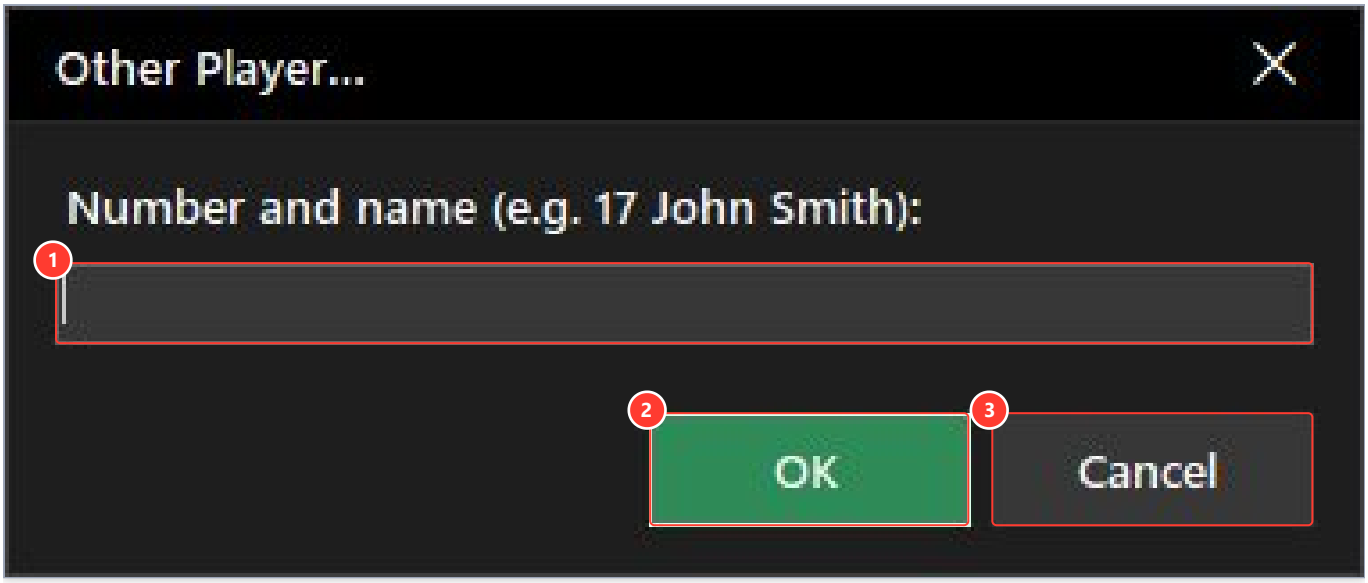


Figure 246. Other Player...

#	Control	What it does
1	**Number and Name**	Type the shirt number, optionally followed by the name: *17 John Smith*, *17 - John Smith*, *#17* or just *17*. Without a number nothing happens.
2	**OK**	Puts the number into the number box; a player with a name that is not in the team list yet is added to it (and appears in later menus and team lists). `Enter` does the same.
3	**Cancel**	Closes the dialog and changes nothing (also `Esc` or the × in the title bar).

Tip The number box clears after each credited action, so a wrong number never sticks to the next entry. Players added with Other Player... are saved in the team list of Field Lacrosse.

Dialogs of the Panel

The panel opens these dialogs. Each one is modal: finish it with OK / Save or close it with Cancel (`Esc`).

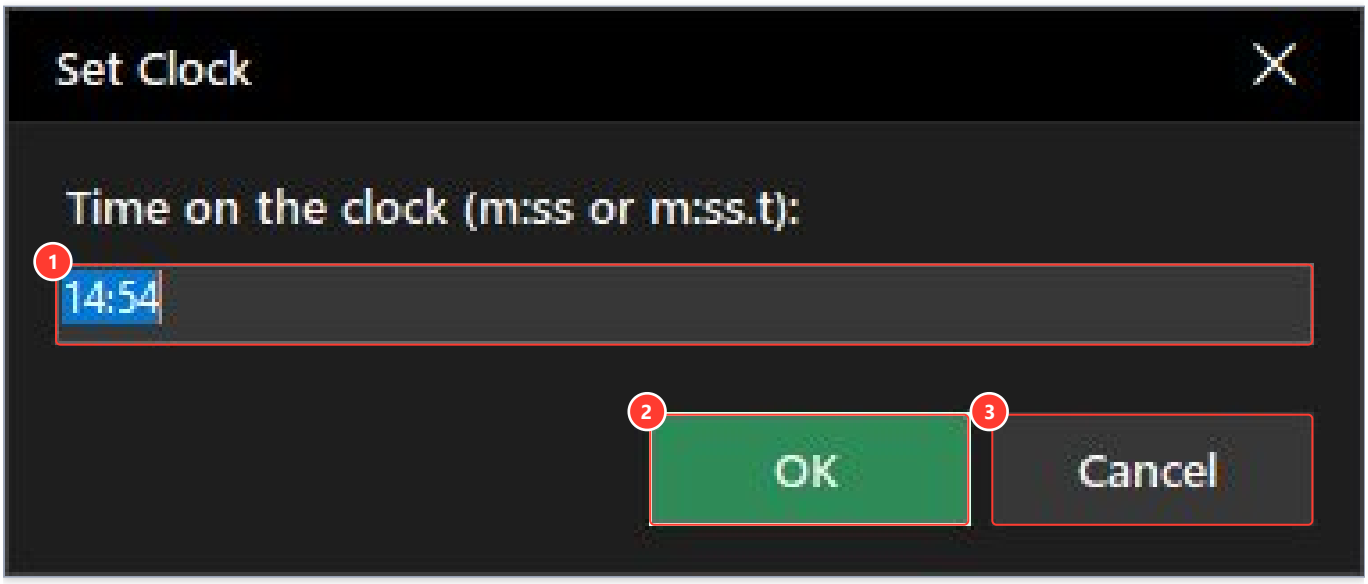


Figure 247. Set Clock (also: double-click the game clock)

#	Control	What it does
1	**Time on the Clock**	Type the time as the clock should show it (m:ss or m:ss.t; plain seconds work too). The clock counts down: type the time left, e.g. *0:42.5* in the last minute.
2	**OK**	Sets the clock; a time outside the running period is refused. `Enter` does the same.
3	**Cancel**	Closes the dialog and changes nothing (also `Esc` or the × in the title bar).

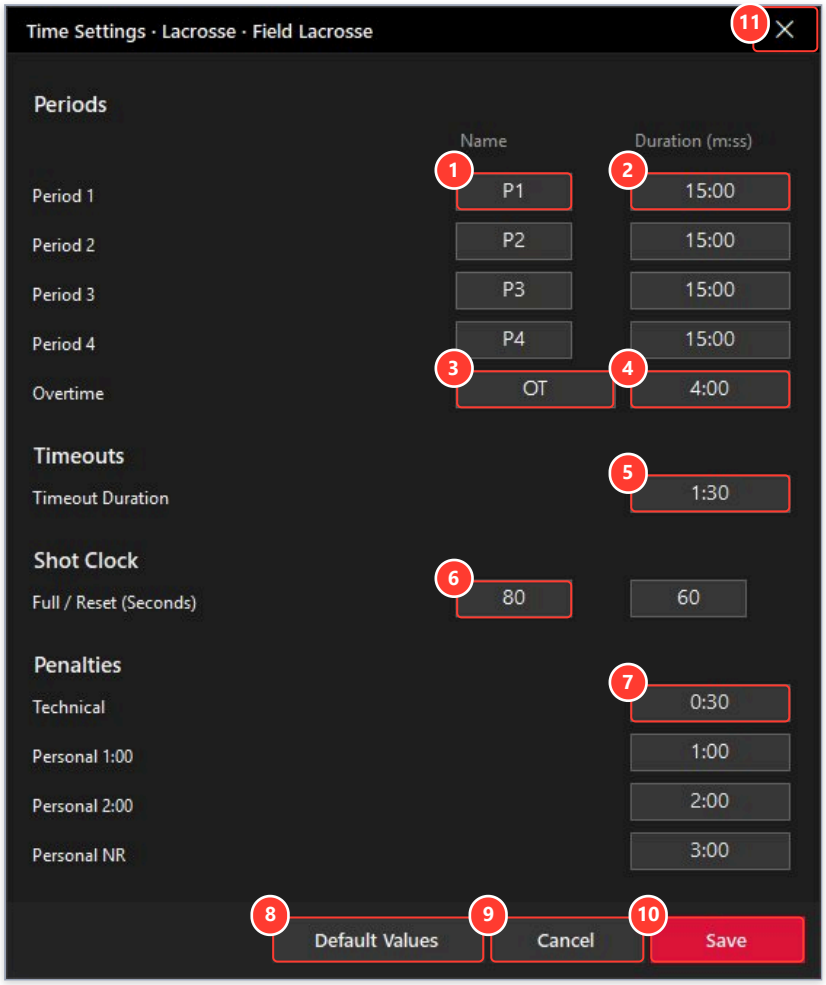


Figure 248. Time Settings · Lacrosse · Field Lacrosse

#	Control	What it does
1	**Period Names**	Names of the periods (P1–P4).
2	**Period Durations**	Length of each period, e.g. 12:00 or 10:00 for youth lacrosse.
3	**Overtime Name**	The name of the overtime periods (OT); the number is added from the second period on (OT2, OT3 …). Type another name to rename them.
4	**Overtime Duration**	Length of each sudden-death overtime period.
5	**Timeout Duration**	Length of a team timeout.
6	**Shot Clock Full / Reset**	Full and reset value of the shot clock in seconds (80 / 60).
7	**Penalty Lengths**	The length of each timed penalty: technical 0:30, personal 1:00 and 2:00, non-releasable 3:00. The red card is counted and has no length. The window is taller for this preset, so all rows are visible.

#	Control	What it does
8	**Default Values**	Puts the factory times of the discipline back into the fields after a confirmation. Nothing is saved until you click Save.
9	**Cancel**	Closes the dialog without saving; when you changed a field it asks first whether to discard the changes.
10	**Save**	Checks and saves the times for this discipline (an invalid value is reported in red and nothing is saved). If a match is in progress you are asked whether to start a new match with the new times now.
11	**Close (×)**	The same as Cancel.

Sport picker. The discipline button above the clock and the sport button in the bottom bar open the sport picker (shown for every sport in Choosing the Sport and Discipline). The disciplines of this sport: **Field Lacrosse** – Men's field lacrosse. **Women's Lacrosse** – Green, yellow and red cards as timed penalties. **Lacrosse Sixes** – 4 × 8 minutes with a 30-second shot clock. A running match asks before it switches.

Keyboard shortcuts. The keyboard icon at the bottom left of the Game page opens the shortcut editor with the actions of Field Lacrosse (its picture is in Keyboard Shortcuts). The default keys of this sport:

Key	Default action in this sport
`F1`	Start / Stop the game clock
`F2`	Next Period
`F3` / `F4`	Shot clock full (80) / reset (60)
`F5` / `F6`	Timeout home / guest
`Num 5`	End Timeout
`F12`	Undo
`Num 7` / `Num 9`	+1 Goal home / guest
`Num 0` / `Num ,`	Take back Goal home / guest
`Num 2`	Horn

Info Page and Screens

The Info, Screens and Teams pages of every sport are shown in The Info Page, The Screens Page and Teams and Players. With Field Lacrosse the Info page has these rows: **Announce**, **Goal**, **Time Penalties** (Technical 0:30, Personal 1:00, Personal 2:00 or Personal 3:00 NR), **Cards** (the Red Card), **Red Card** (dots that set 0–4 red cards per team), **Player Intro**, **Substitution**, **Multiple Substitution**, **Team Lists**, **Officials**, **Info Screens** (Intro, Result, Announce and Timeout).

The Screens page lists the St screens of Field Lacrosse – Game, Intro, Result, Announce, Timeout, Goal, Card, Substitution, Substitutions, Player Intro, Team List and Officials (the Timeout screen exists only in sports with team timeouts). Its Player Panels columns for Field Lacrosse are No, Name, Points, Penalties.

The player box of each Info page row drops the team list of the chosen team:

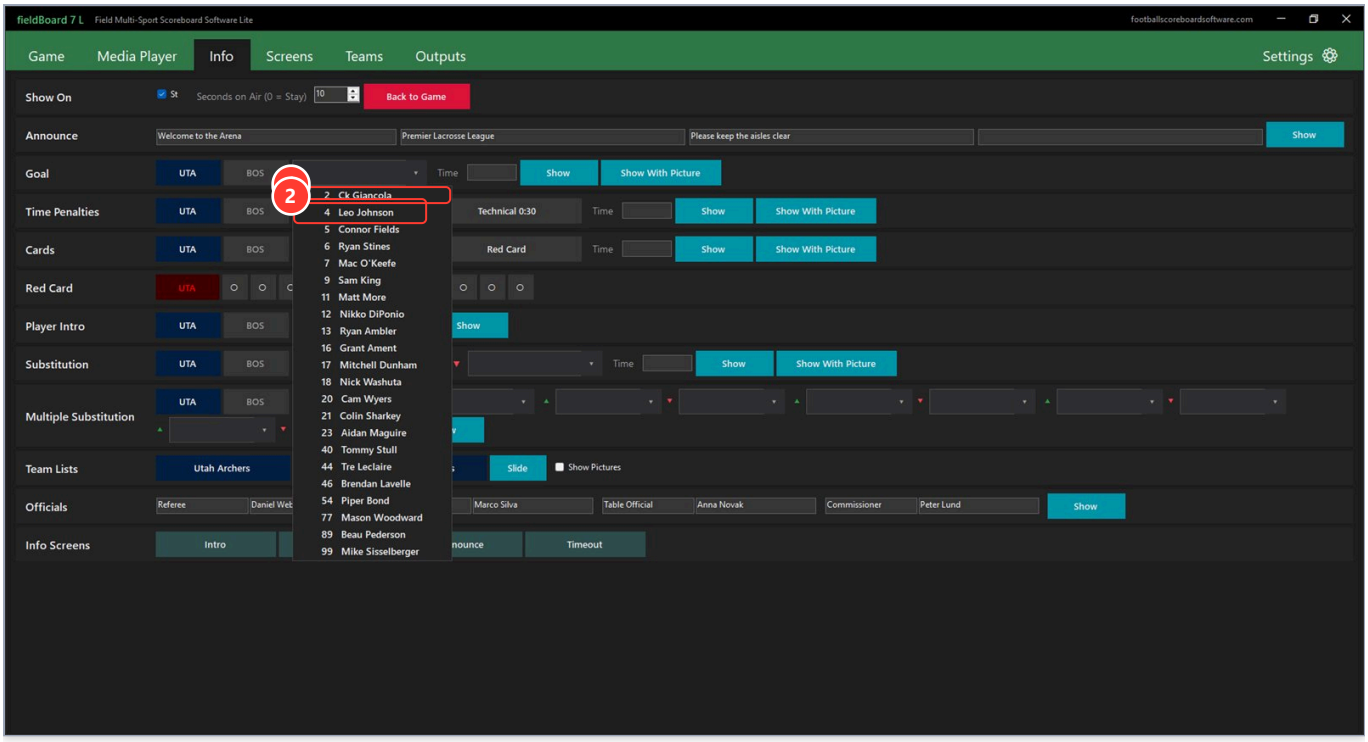


Figure 249. The player list of the Info page (Field Lacrosse)

#	Control	What it does
1	**Players (Number · Name)**	The players of the chosen team from the Teams page, sorted by number. Click one to put "number name" into the player box; you can still edit the text before you click Show. Without a team list the menu only says that you can type the number and name.
2	**Player Box**	The box the list belongs to; the ▾ at its right edge opens the list (also `Alt` + `↓` or `F4`).

> **Tip** Scoring on the Game page does not put a graphic on air by itself – use the Goal, Cards and Substitution rows of the Info page for that, so the operator decides what the spectators see.

Outputs of Field Lacrosse

The board of Field Lacrosse (see Outputs and Sending the Board to the LED Screen for the monitor and the area):

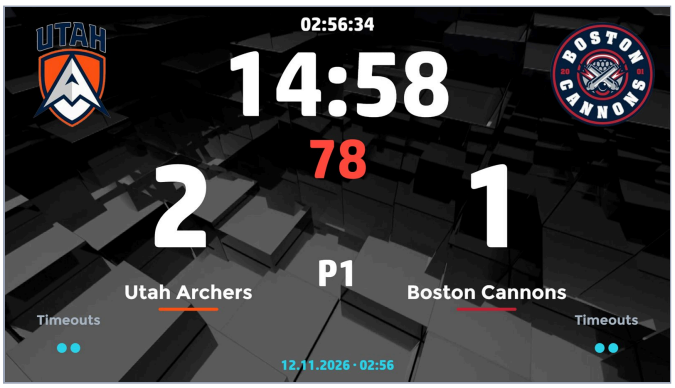


Figure 250. St – Standard (LED) board: logos, score, clock, period, the red shot clock, the timeouts left and – while one runs – the penalties of each team

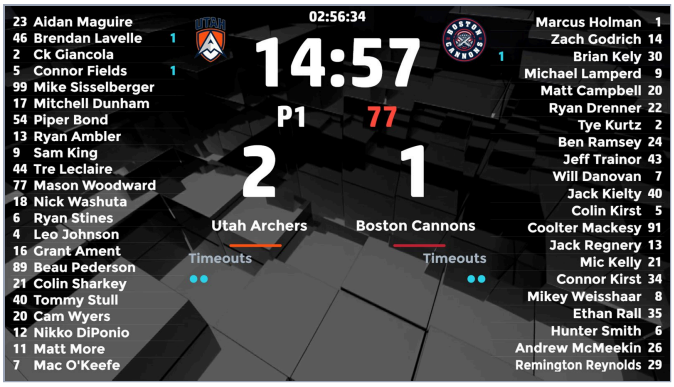


Figure 251. St with Player Panels (Player Panels in the bottom bar of the Game page): both team lists with the goals of each player

The other St screens. Event graphics (goal, card, substitution, team list, officials) go back to the game board after the **Seconds on Air** set on the Info page; Intro, Result, Announce, Timeout stay until you click **Game** in the St row.



Figure 252. Intro – both teams with logos, the event name, the venue and the date; click Intro in the St row of the Game page before the match.

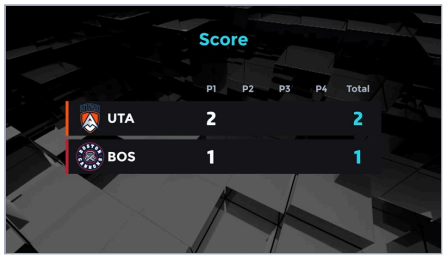


Figure 253. Result – the score of each period and the total; click Result in the St row at half-time and after the final whistle.

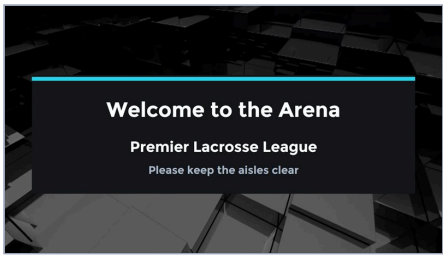


Figure 254. Announce – the title and three lines from the Info page or the Screens page; Show on the Announce row (or Announce in the St row).

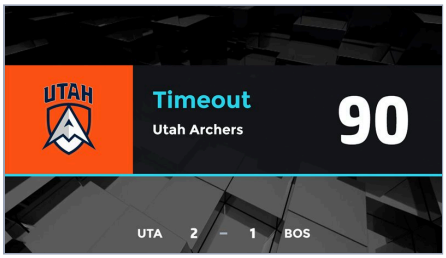


Figure 255. Timeout – the team that called the timeout and its countdown (90 s); click Timeout in the St row after the team's timeout button.



Figure 256. Goal – the scorer's number, name, photo and team with the new score; Show on the Goal row of the Info page.

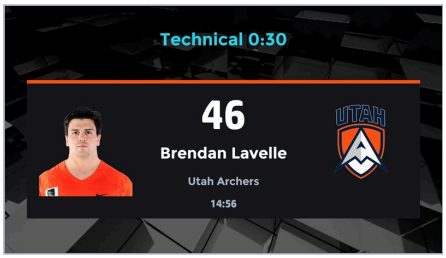


Figure 257. Card – player, team, minute and the penalty or card; Show on the Time Penalties or Cards row.

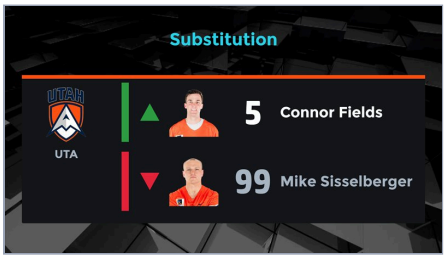


Figure 258. Substitution – player in (▲) and out (▼); Show on the Substitution row of the Info page.

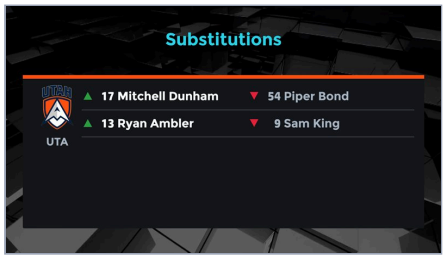


Figure 259. Substitutions – up to five pairs of one team; Show on the Multiple Substitution row.



Figure 260. Player Intro – one player on the whole board; Player Intro row, or Slide on the Team Lists row.



Figure 261. Team List – the players marked Show with numbers and the coach; a team button on the Team Lists row.

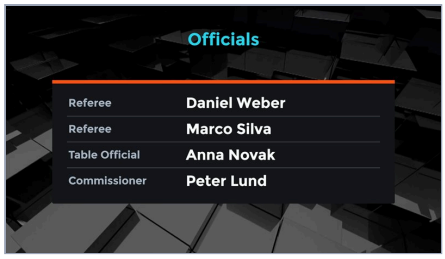


Figure 262. Officials – up to four roles and names; Show on the Officials row.

Remote Control for Field Lacrosse

The remote page builds itself from the actions of the running discipline (see Remote Control for connecting a phone or tablet). For Field Lacrosse it looks like this:

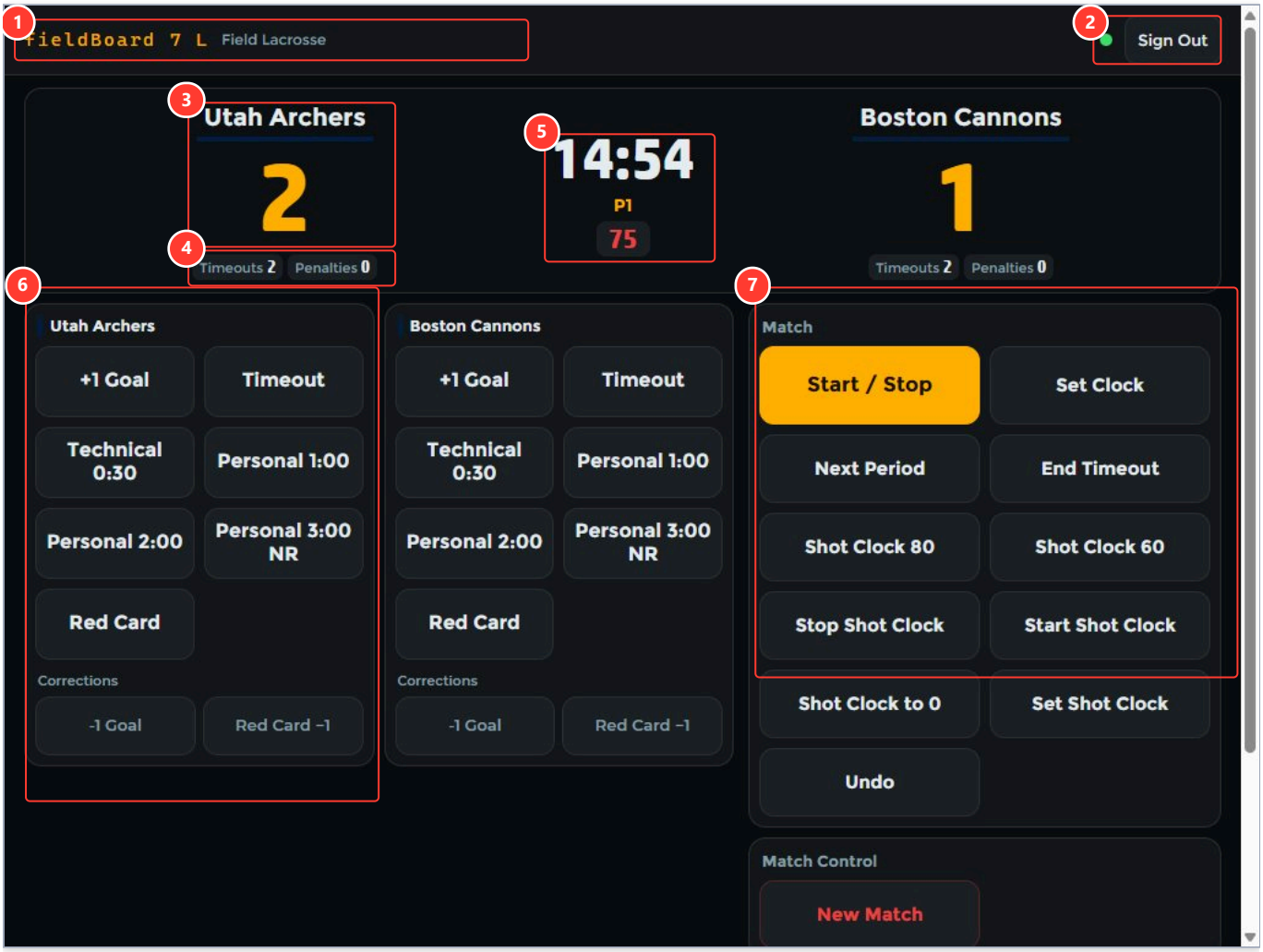


Figure 263. The remote on a tablet (Field Lacrosse)

#	Control	What it does
1	**Product Name · Sport**	The program name (fieldBoard 7 L) and the running sport or discipline (the discipline alone when its name already contains the sport, e.g. *Rugby Union*). When the operator changes the sport or starts a new match on the PC, the page rebuilds its buttons by itself. The texts of the page follow the language of the program.
2	**Connection Dot / Sign Out**	Green = connected to the scoreboard. **Sign Out** ends the session after a confirmation.

#	Control	What it does
3	**Team Name and Score**	Name (underlined in the team colour; a long name takes two lines) and score of each team, updated several times a second.
4	**Chips**	**Timeouts** left and **Penalties** running for each team.
5	**Clock and Period**	The game clock (green while it runs) and the period; the red shot clock appears under it.
6	**Team Section (Home)**	The actions of one team as large buttons (scores, Timeout and the penalties); the guest section is next to it. Below them, the **Corrections** take the last entry of a type back. A score button shows its value once (*+1 Goal*, *-1 Goal*); long captions wrap at a word.
7	**Match Section**	Actions that belong to the match: Start / Stop, Set Clock, Next Period, End Timeout, Shot Clock 80 / Shot Clock 60, Stop Shot Clock, Shot Clock to 0, Set Shot Clock, Undo. **Start / Stop** is the large amber button.

Section	Button	What it does
Team (once per team)	+1 Goal	Adds a goal (clock stops, shot clock resets).
	Timeout	Starts a team timeout.
	Technical 0:30 / Personal 1:00 / Personal 2:00 / Personal 3:00 NR	Starts that penalty for the team.
	Red Card	Counts a red card (ejection).
Corrections (per team)	-1 Goal	Takes a goal back.
	Red Card −1	Takes a red card back (timed penalties are removed with ✕ on the PC).
Match	Start / Stop	Starts or stops the game clock.
	Set Clock	Asks for the time.
	Next Period	Next period or overtime.
	End Timeout	Ends the running timeout.
	Shot Clock 80 / Shot Clock 60	Sets and starts the shot clock (Lacrosse Sixes: one Shot Clock 30 button).
	Stop Shot Clock	Stops the shot clock.
	Shot Clock to 0	Sets the shot clock to 0 and stops it, without the buzzer (the ⊘ on the panel).
	Set Shot Clock	Asks for the shot clock in seconds (e.g. 7 or 4.5).
	Undo	Takes the last action back.
Match Control	New Match	Asks "New Match? This cannot be undone from the remote." – **Yes** resets the match like New Match on the PC.

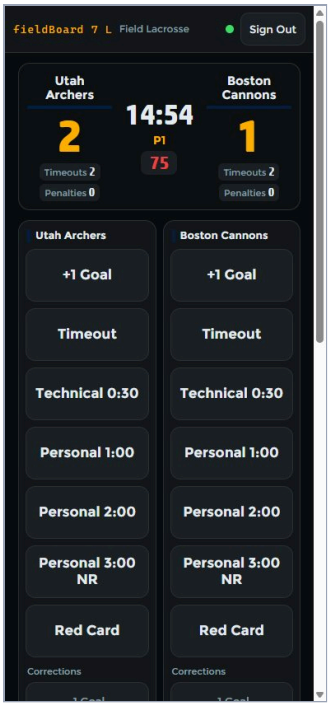


Figure 264. Phone: score bar and the team sections (two columns)

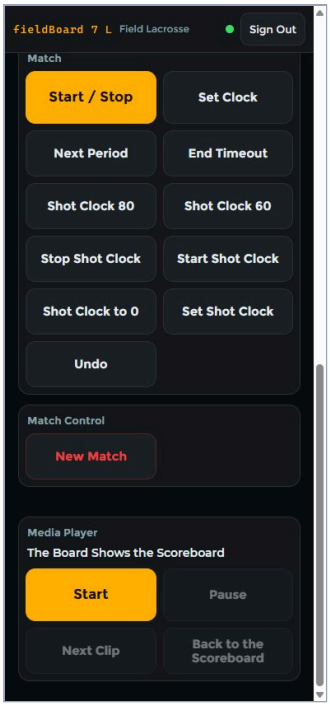


Figure 265. Phone, scrolled down: Corrections, Match and Match Control

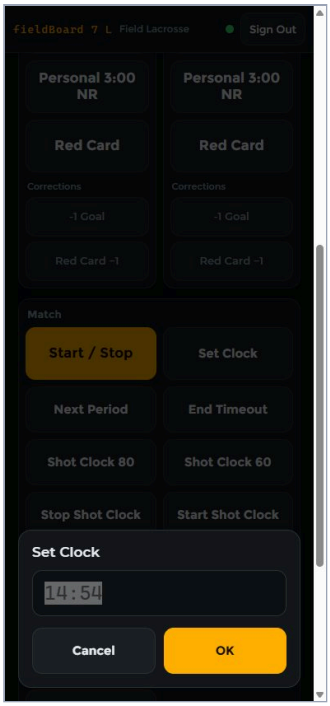


Figure 266. Phone: Set Clock opens a value sheet with the current time (mm:ss); OK sends it

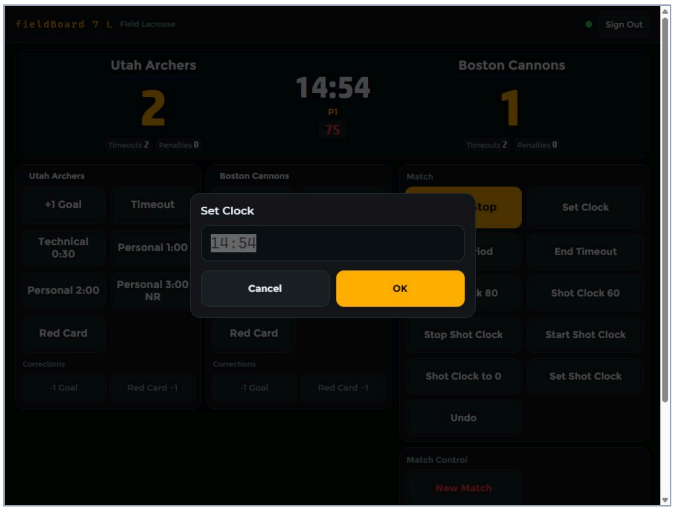


Figure 267. Tablet: the value sheet of Set Clock – type the time and tap OK, or Cancel

Scenarios

1. At the face-off click **Start**; when a team gains possession click **80** to run the shot clock.
2. A home player gets a 1-minute personal foul: type the number and click **1:00 1**. The timer runs with the game clock.
3. The guest team scores while the home team is short-handed: click the guest ↑. The clock stops, the shot clock resets to 80 and the 1-minute penalty is released.
4. The home team calls a timeout: click the home ▶ timeout button. The 90-second countdown runs; click the timeout digits to end it early.
5. Restart with **Start** at the whistle.

1. Pick **Lacrosse** ▸ **Women's Lacrosse**. The penalty buttons become G1, Y2, R5 and Y/R, the shot clock 90 / 60.
2. A green card: type the number and click **G1**; a yellow card **Y2**. Both are released when the other team scores.

3. Level after the 4th period: click **Overtime 1**. The clock is set to 3:00.
4. Still level at 0:00: click the same button again for Overtime 2.
5. The first goal in overtime stops the clock and ends the match; put the **Result** screen on air.

24 Usage Scenarios

These workflows show fieldBoard 7 L at typical field venues. They combine the sport panels with the shared parts of the program (Outputs, Screens, Teams, Info page and remote control).

1. Pick **Rugby** ▸ **Rugby Union**, type the two team names straight into the name boxes on the Game page and press `Enter`.
2. Leave the team lists empty. When a try is scored, type the scorer's shirt number in the number box and click the green **T5** – the number is credited even though there is no list.
3. For a yellow card type the number and click **Y10**; the sin-bin timer shows the number.
4. If you want a name on the board, use ▾ ▸ **Other Player…** and type e.g. *12 Sam Price*: the player is added to the team list and appears in later menus.
5. Without numbers simply click the score buttons: the score counts for the team only.

1. Choose **Football** and open **Time Settings**. Type 20:00 for both halves and click **Save**.
2. The times are stored for the Football discipline and stay for every following match until you change them or click **Default Values**.
3. Before each game load the next two teams on the Teams page (or type the names on the Game page) and click **New Match**.
4. If the tournament plays straight through without added time, simply click **Second Half** at 20:00; the clock jumps to 20:00 and waits for Start.
5. Use the **Result** screen after each game and the **Announce** screen to call the next teams to the pitch.

1. Click **Stop** as soon as the umpires suspend play. Running suspensions stop with the game clock.
2. Use the Announce row of the Info page to tell spectators about the delay.
3. When the umpires confirm the remaining time (e.g. 8:12), click **Set Clock** (or double-click the clock) and type *8:12*.
4. If a card was entered for the wrong team during the confusion, click ✕ next to its timer and enter it again for the right team; ↶ **Undo** takes back the last actions in order.
5. Resume with **Start** at the restart.

1. Before the first game click the sport button and pick **Gaelic Football** ▸ **Gaelic Football Club**. The panel and the board change to goals-points.
2. After the match pick **Hurling** ▸ **Hurling**. Each sport keeps its own teams, times, designs and keys, so the morning's teams are still there tomorrow.
3. For the evening pick **Lacrosse** ▸ **Field Lacrosse**; the panel now has the shot clock and timeouts, and the board shows them.
4. The outputs stay switched on – St simply shows the board of the sport that is running.
5. If one sport needs a different look, change its design on the Board Designs pages; the other sports are not touched.

1. Check in **Settings** that the remote control is running and note the address and PIN (see Remote Control).
2. Open the address on the phone (same Wi-Fi) and sign in with the PIN.
3. Start and stop the clock and add scores from the phone; the PC panel follows every action.
4. The remote page is built from the actions of the running discipline, so cards, added time and the shoot-out can be sent from the phone as well; actions that reset the match ask first.

1. Pick **American Football** and set the quarters to 12:00 in Time Settings.
2. Run the game clock with **Start / Stop** (`F1`) as the officials wind and stop it.
3. After each play click **25** or **40** to start the play clock, then **Next Down** or **First Down** and **Ball On …**; on a turnover click the other team's **Possession** button.
4. Timeouts: click the team's ▶ timeout button – the clock stops and one lamp lights; timeouts come back at the 3rd quarter.
5. The St board shows down, distance and ball position under the score.

25 Field Sports Quick Reference

Sport / preset	Periods & clock	Extra / overtime	Score buttons	Card / penalty buttons	Extras
Football	2 × 45:00, up, continuous, added time	ET1, ET2 15:00	↑ / ↓ goal	Y, Y/R, R (counted)	Shoot-Out
Rugby Union	2 × 40:00, up, continuous, added time	E1, E2 10:00	T5 C2 PG3 DG3 PT7	Y10, R20 (timed), R	Kicking
Rugby League	2 × 40:00, up, added time	E1, E2 5:00, golden point	T4 C2 PG2 FG1 FG2	Y10, R	tackle count, possession
Rugby Sevens	2 × 7:00, up, added time	E1, E2 5:00, sudden death	T5 C2 PG3 DG3 PT7	Y2, R	–
Touch / Tag Rugby	2 × 20:00, up, added time	–	↑ / ↓ touchdown	Y2, R	touch count, possession
American Football	4 × 15:00, down	OT 15:00	TD PAT 2PT FG S	–	play clock 40/25, downs, possession, 3 timeouts per half
Gaelic Inter-county / Club	2 × 35:00 / 2 × 30:00, up, added time	E1, E2 10:00	G3 P1 TP2, goals-points	Y, B10, R	Shoot-Out
Hurling / Camogie	2 × 35:00 / 2 × 30:00, up, added time	E1, E2 10:00	G3 P1, goals-points	Y, B10, R / Y, R	Shoot-Out
Field Hockey	4 × 15:00, down, stops on goal	–	↑ / ↓ goal	G2, Y5, Y10 (timed), R	Shoot-Out
Field Lacrosse	4 × 15:00, down, stops on goal	OT 4:00, sudden death	↑ / ↓ goal	0:30 (technical), 1:00, 2:00 (personal), 3:00 NR (timed), R	shot clock 80/60, 2 timeouts
Women's Lacrosse	4 × 15:00, down, stops on goal	OT 3:00, sudden death	↑ / ↓ goal	G1, Y2, R5 (timed), Y/R	shot clock 90/60, 2 timeouts
Lacrosse Sixes	4 × 8:00, down	OT 3:00, sudden death	↑ / ↓ goal	0:30 (minor), 1:00 (major), 3:00 NR (timed), Y, R	shot clock 30, 2 timeouts

Mouse action	Result
Click a bottom-row score button (rugby, Gaelic, hurling, American football)	Adds that score, credited to the player in the number box
Click a top-row score button	Takes one score of that type back
Click ↑ / ↓ (football, touch rugby, hockey, lacrosse)	Adds / removes a goal

Mouse action	Result
Click a counted card (Y, Y/R, R)	Counts the card for the team and player
Right-click a counted card	Takes one card of that type back
Click a timed card or penalty (Y10, B10, G2, 1:00 1 …)	Starts a sin-bin / penalty timer for the player
Click ✕ next to a timer	Removes that timer
Double-click the game clock	Set the clock
Click the shot / play clock digits	Starts it again from where it stands
Click the timeout digits (lacrosse)	Ends the running timeout
Click the period button of the running overtime	Next overtime period
Click Shoot-Out / Kicking	Starts the shoot-out (or kicking competition); click again to end it
Click Possession (American football, Rugby League, Touch / Tag Rugby)	Gives the ball to that team

Key (default)	Football	Rugby Union	American Football	Gaelic / Hurling	Hockey	Lacrosse
`F1` / `F2` / `F12`	Start / Stop, Next Period, Undo	same	same	same	same	same
`F3` / `F4`	–	–	Play clock 40 / 25	–	–	Shot clock 80 / 60 (Sixes: F3 = 30)
`F5` / `F6`, `Num 5`	–	–	Timeout home / guest, end timeout	–	–	Timeout home / guest, end timeout
`F11`	–	– (League, Touch: possession)	Possession	–	–	–
`Num 7` / `Num 9`	Goal	Try	Touchdown	Goal	Goal	Goal
`Num 4` / `Num 6`	–	Conversion	Extra Point	Point	–	–
`Num 1` / `Num 3`	–	Penalty Goal	Two-Point Conversion	Two-Pointer (Gaelic)	–	–
`Num 0`, `Num /`, `Num –` / `Num ,`, `Num *`, `Num +`	Take back the score of the key above (home / guest)	same	same	same	same	same
`Num 2`	Horn	Horn	Horn	Horn	Horn	Horn

26 Troubleshooting

Problem	What to do
A board does not appear on the second monitor.	Check that Windows uses *Extend* (not Duplicate), then choose the monitor on the Outputs page and tick **Show**. More in *Sending the Board to the LED Screen → Troubleshooting the LED Output*.
The board is too small or cut off on an LED wall.	Untick **Full Screen** and enter the exact Left / Top / Width / Height of the LED controller's area on that monitor (see *LED Sender Card*).
I have to place the board again at every start.	No: the Outputs page saves everything at once and the board opens at its place by itself. If it does not, check that the LED device is switched on before or soon after the program starts, and that Windows still uses *Extend*.
A clip of the Media Player does not play.	The St output must be open. A red file name means the file was moved or deleted: add it again. Some video formats need the matching Windows codec; MP4 (H.264) always works.
A keyboard shortcut does nothing.	Check **Global Shortcuts On** in the keyboard shortcut editor (the keyboard icon at the bottom left is green when on), switch `NumLock` on, and make sure the key is assigned for the **current sport**. Numpad keys do not score while you type in a text box of the program.
The phone cannot open the remote page.	Same network as the PC (not mobile data, not a guest Wi-Fi)? Settings shows **Running**? Allow TCP 1907 in the Windows firewall. If the status says *Not running*, the port is used by another program: choose another port and click Apply.
The PIN is refused or the pad is locked.	After five wrong PINs the device is locked for 30 s, then longer (up to 15 minutes). Wait for the countdown; check the PIN on the Settings page.
The remote shows a red dot or "No Connection to the Scoreboard".	The phone lost the Wi-Fi or the PC's server stopped. It reconnects by itself; check the Wi-Fi and the remote button on the right strip (green = running).
The new times are not used.	Times apply to a new match. After saving, answer **Yes** to start a new match, or start one with **New Match**.
Team names or the team list changes do not appear.	Click **Apply** on the Teams page – nothing is saved before.
The language did not change.	The language is used after a restart of the program.
The program closed unexpectedly.	Start it again and answer **Yes** to *Restore the last match?*. The match continues with the clock stopped; check the clock and start it again.

Every start, error and network event is written to the log file of the day in *data\logs*; send it with a problem report.

27 Files and Folders

All your data lives in the *data* folder inside the program folder. To move fieldBoard 7 L to another PC, or to keep a backup, copy the whole *data* folder.

Folder / file	Content
data\config\settings.json	Language, remote control (port, PIN), console and UDP settings, sound on / off, last sport and discipline.
data\config\outputs.json	The board output: shown, monitor (number and Windows name), full screen, window position, player panels; its design per sport; player panel columns; background video / picture on or off.
data\media\playlists	The Media Player: playlist01.json (the clips are referenced where they are), urls.json (the URL list) and player.json (display mode, sound, return, image play duration).
data\config\hotkeys.json	Keyboard shortcuts per sport and the Global Shortcuts On switch.
data\config\<sport>\setup.json	Event, venue, teams, colours, logos, team lists, officials of a sport (the competition for swimming and diving).
data\config\<sport>\rules\<discipline>.json	Your own Time Settings of a discipline (only the values that differ from the factory values).
data\config\running.json	Points to the journal of the running match; used to offer the restore after an unexpected end.
data\designs	Your own board designs, per sport. The factory masters are in the program folder and are never changed.
data\logos	Team logos chosen on the Teams page.
data\media\background	Background video and picture of the board.
data\media\players	Player photos chosen in the Photo column of the Teams page (copies of your files).
data\sounds	Your own sounds (01.wav … 05.wav) replace the shipped ones.
data\matches	One journal file per match (every command with its time); used to restore a match after an unexpected end.
data\logs	One log file per day.
data\webview2	Working files of the board windows (browser cache). Safe to delete while the program is closed.

> **Note** Edit the files only while the program is closed. If a settings file cannot be read, the program starts with default values and keeps the damaged file as *.bad*.