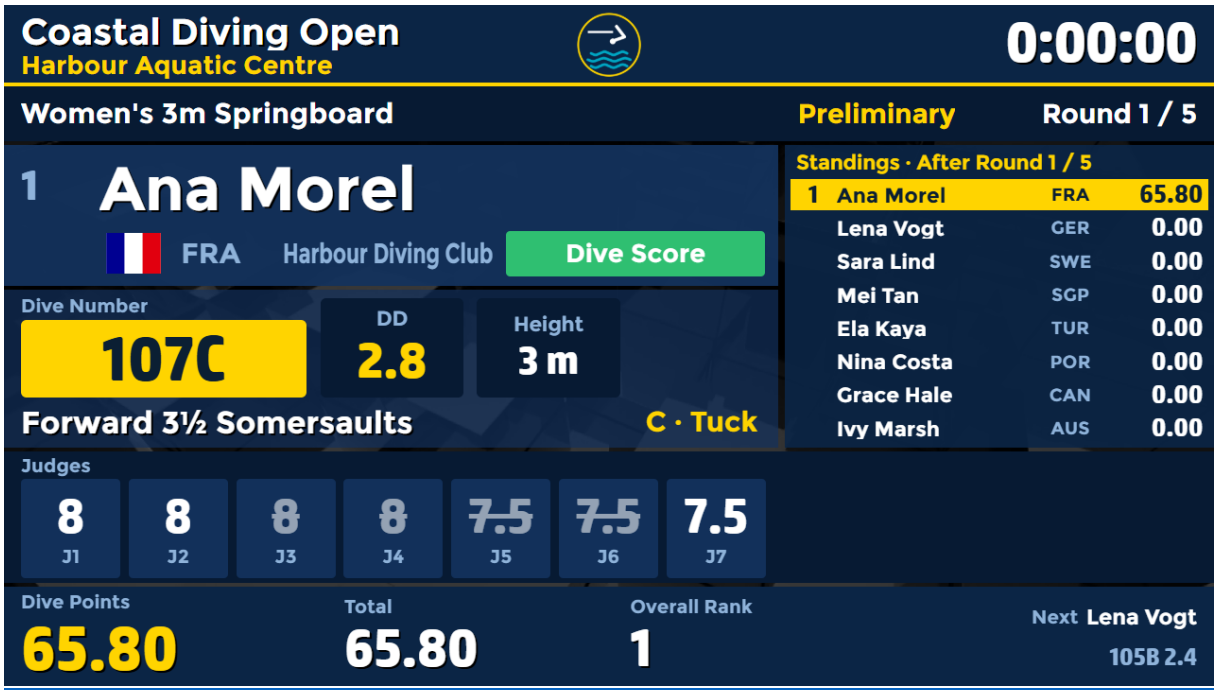
# divingBoard 7

## Professional Led Display Scoreboard Software

USER MANUAL

www.footballscoreboardsoftware.com

arslan.ziya@gmail.com




LANGUAGE SUPPORT



divingBoard supports all languages. You can use special characters from any language such as Arabic, Chinese, Hebrew, and other Asian alphabets in the application.

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# 1. Introduction

## 1.1 What divingBoard 7 Does

divingBoard 7 is scoreboard and competition-graphics software for diving. You run the competition from a control window on the operator PC. The program draws the scoreboard in a separate board window that you place on a second display, a projector or an LED wall, or send over the network as an NDI video stream.

The judges give their awards on their phones or you type them in at the desk. The program cancels the awards, calculates the points with the degree of difficulty and keeps the standings. The operator confirms each dive with Publish. Corrections are always one click away.

Besides the score, divingBoard 7 shows:

- the diver with country flag, country code and team, or both names of a synchronised pair;
- the dive number, its name, position, height and degree of difficulty (DD);
- the judges' awards, with the cancelled awards crossed out, and the points, total and rank;
- the top eight of the stage and the next diver;
- notices such as Failed Dive, Perfect Dive and New Leader;
- info screens: Now Diving, Dive Score, Dive Sheet, Running Order, Round Result, Standings, Final Result, Judges, Officials, Status Card and Programme;
- sponsor images, scrolling texts, banners, announcements, video playlists, camera pictures and screen captures.

It also prints the results in World Aquatics, US high school (NFHS) and US college (NCAA) formats.

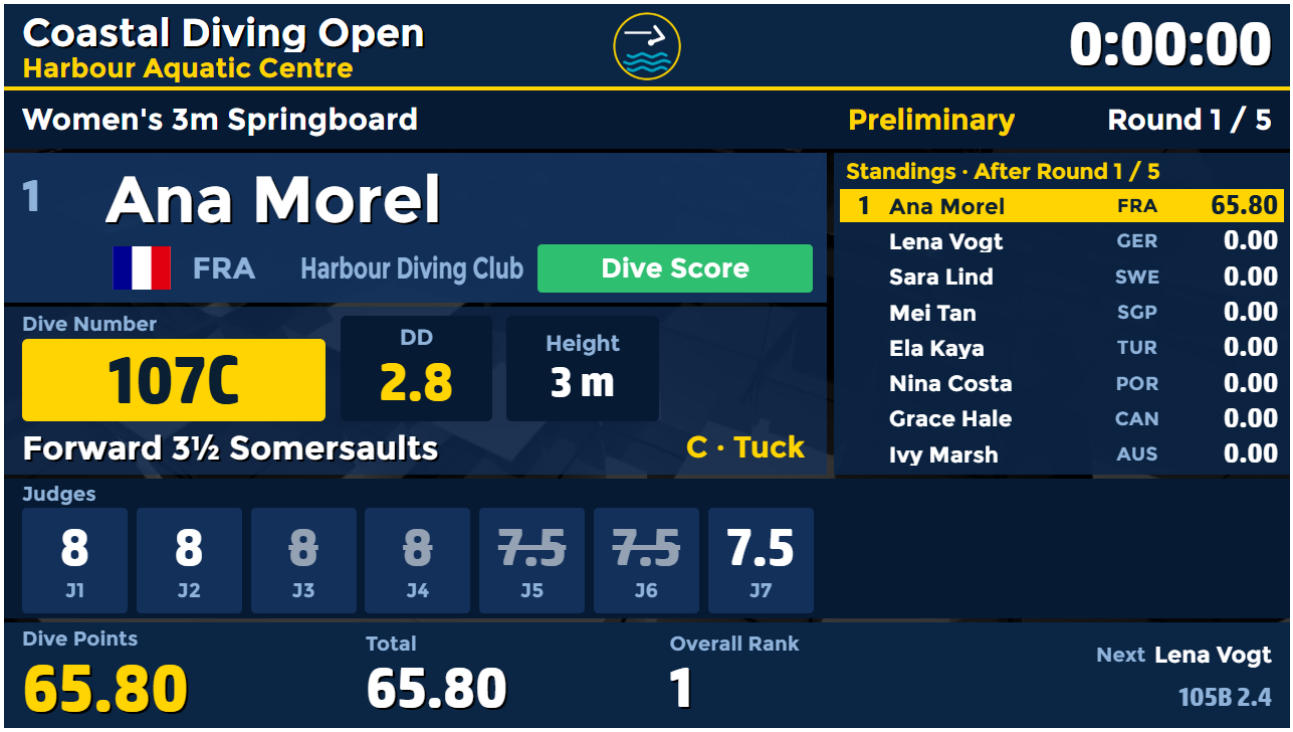



*Figure 1. The Standard board after a published dive.*

## 1.2 Supported Competitions

One installation covers these competitions. You choose the event type in the New Competition window (chapter 6). Every event type starts with ready rounds, limits and stages; you can change every value and make your own.

| Rule Set | Event Types | What Is Special |
|---|---|---|
| World Aquatics | Springboard 1 m and 3 m, platform 10 m, synchronised, Mixed Team Event | Preliminary, Semi-Final and Final that start from zero |
| World Aquatics, age groups | Groups A, B and C, Junior Synchronised | Voluntary DD limits |
| US High School (NFHS) | 6-Dive Dual Meet, 11-Dive Championship | Score sheet per diver, team points |
| US College (NCAA) | 6-Dive Dual Meets, 11-Dive Championships, Platform | Stages that keep the total, team points |
| Custom | Your own event types | High diving and any other format |

The dive numbers and DD values ship ready for 1, 3, 5, 7.5 and 10 m and stay editable. High diving heights are added by the customer (chapter 6.11).

> **Note:** The US presets must be checked against the current NFHS, NCAA and state or conference rules before you use them (chapter 6.6).

## 1.3 Display Modes

The board has four display modes. Each has its own look; you switch between them with the St, Sp, Ad and CK buttons on the Game tab (chapter 7).

- Standard (St): the full-screen scoreboard with the title and venue, the diver, the dive, the judges' awards and the leaders.
- Sponsored (Sp): the Standard scoreboard with a sponsor band at the bottom or the top, showing sponsor images or a scrolling text.
- Advertisement (Ad): a scoreboard column beside a large area for a video playlist, a camera or a screen capture, with a scrolling banner below.
- Chroma Key (CK): a compact scorebug and lower-third info graphics on a solid key colour, to be keyed over a live TV picture in a vision mixer.

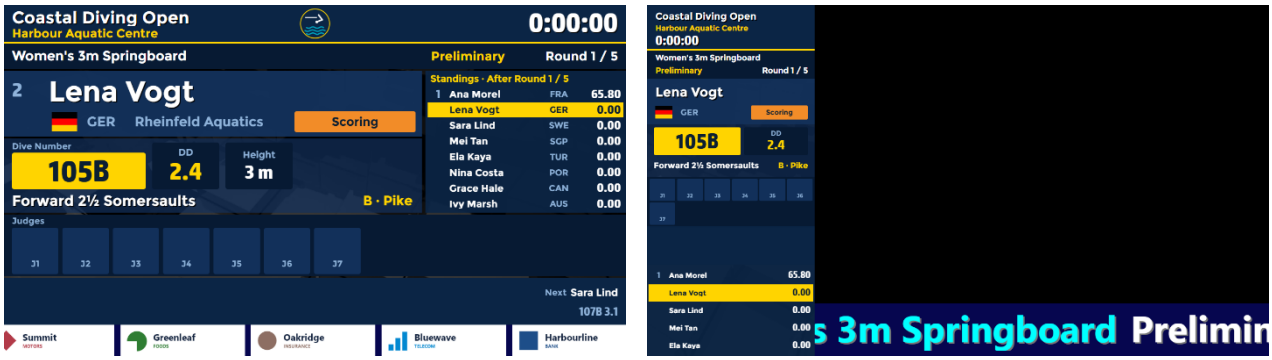



*Figure 2. The Sponsored (left) and Advertisement (right) display modes.*

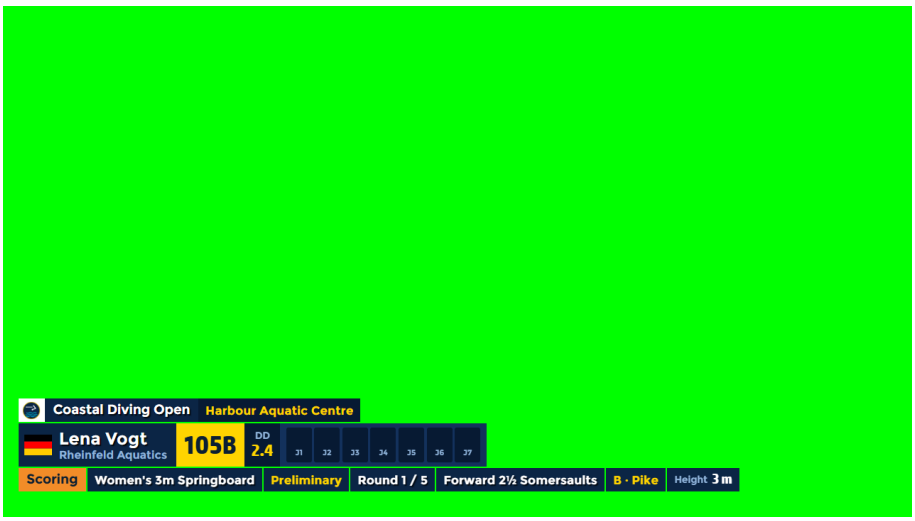



*Figure 3. The Chroma Key scorebug on the green key colour.*

Every board comes in three factory designs, Navy (the default), Charcoal and Clay. You can change any element of a design in the design editor and save your own designs (chapter 8).

## 1.4 What's in Version 7.6.10

Version 7.6.10 is the first version of divingBoard 7. It is built on the current Board7 platform (the platform of soccerBoard 7).

Competition:

- Event types for World Aquatics, age groups, NFHS and NCAA, with rounds, stages, limits and panels of 3, 5, 7, 9 or 11 judges.
- The dive table of the World Aquatics rules in force from February 2026, with the DD formula.
- Entries and dive sheets, with sheet warnings, a random draw and CSV import and export.
- Scoring for individual, synchronised and team events: cancelled awards, the penalties Failed Dive, Re-Start, Max 2 and Max 4½, and the average for a missing judge.
- Stages with the top divers going on in reverse order, and stages that keep the total.

Judges and desk:

- A phone page for the judges, with a PIN and a QR code per seat. No app is needed.
- A desk that uses the whole window, with judge tiles, an award pad and online marks for the phones.
- The operator confirms each dive; Auto Publish is an option.
- Correct and Repeat Dive, with the competition saved after every action and an archive of past competitions.
- A guide bar that names the next step of the rules and frames the button that does it.
- The rule's situations in the flow: the one-minute warning, lots between equal totals, reserves, repeated dives kept for an appeal, DNS, WD and DSQ, unsafe dive calls from the judges, and an event that cannot continue.
- Manual Entry: change a dive, type the points of a dive, put any message on the LED.

Boards, reports and remote control:

- All boards and twelve info screens in a diving design, readable from a distance, in three factory designs (Navy, Charcoal, Clay). Each info screen is also a Chroma Key lower third.
- Every element of a board can be moved, resized and recoloured in the design editor. Boards scale to 16:9, 4:3, 5:4 and wide LED formats.
- Country flags as sharp vector images, entered by country code (ITA, GER, SUI...).
- Printable reports in World Aquatics, NFHS and NCAA formats, with PDF and HTML output.
- A remote control page for phones and tablets with Score, Info, Setup and Media tabs.

- An HTTP API for the flow of a dive, the board and the info screens.
- The Keyboard Hook Manager with 10 diving actions on the numeric keypad.

## 1.5 How to Read This Guide

Chapters 2 to 4 cover installation, licensing and the main window. Chapters 5 and 6 are the core of the work during a competition: the diving desk, and the competitions, event types and dive table. Chapters 7 to 9 describe the boards, designs and info screens. Chapters 10 to 12 cover entries and dive sheets, results and reports, and the judges. Chapter 13 covers the media. Chapters 14 to 16 cover the remote control, the HTTP API and the keyboard shortcuts. The guide ends with languages, the settings reference, troubleshooting and the appendices.

- Names of buttons and labels are written as the English interface shows them. In another interface language the captions differ; the places are the same.
- Steps are numbered. Do them in this order.

> **Note:** The pictures show the program with its fictional sample competition, divers, judges and sponsors. Many pictures were taken without a licence, so they show the word DEMO (chapter 3).

Chapter 20 shows every screen with numbered buttons. Chapter 21 walks through whole competitions and difficult moments step by step: start there if you run a competition for the first time.

## 1.6 Website and Support

- Website: www.footballscoreboardsoftware.com
- Support: arslan.ziya@gmail.com (also shown on the License page of the settings)

# 2. Installation and First Start

## 2.1 System Requirements

| Item | Requirement |
|---|---|
| Windows | 64-bit Windows. The setup does not install on a 32-bit system. |
| .NET Framework | 4.7.2 or later |
| Microsoft Edge WebView2 Runtime | Required: every board is drawn with it (section 19.1) |
| Rights | Administrator rights for the setup. The desktop shortcut starts the program as administrator. |
| Main window | At least 1024 × 640 pixels |
| Board output | A second monitor, a projector, an LED wall controller or an NDI receiver for the board window |
| Network | Only for the judges' phones and the remote control (port 1907) and NDI |
| Display scaling | 100 % on the monitor that shows the board is recommended (section 19.2) |

## 2.2 Installing

1. Close divingBoard 7 if it runs. The setup also closes it before it copies files.
2. Run divingBoard7Setup.exe and follow the wizard.
3. The program is installed in C:\divingBoard7. The folder cannot be changed.

During the installation the setup also:

- installs the fonts of the boards in Windows ("Installing fonts...");
- adds four Windows firewall rules for port 1907, named "divingBoard 1907 TCP IN", "UDP IN", "TCP OUT" and "UDP OUT" ("Configuring firewall rule...");
- creates two desktop shortcuts: divingBoard7 (the program) and divingBoard7 Help (this guide).

In Apps & Features the program is listed as Diving Scoreboard Software 7.6.10.12.

## 2.3 First Start

Start divingBoard 7 with the desktop shortcut. A small status card appears while the program loads:

- "divingBoard Started..."
- "Checking license..." while the licence is read. Reading the PC licence can take up to 30 seconds on a slow PC; the USB scan up to 8 seconds.
- "Renderer Initialized..." and "Entering Main Loop..." while the boards are prepared.

Then the main window opens maximised with the Game tab, and the board window opens at the top left.

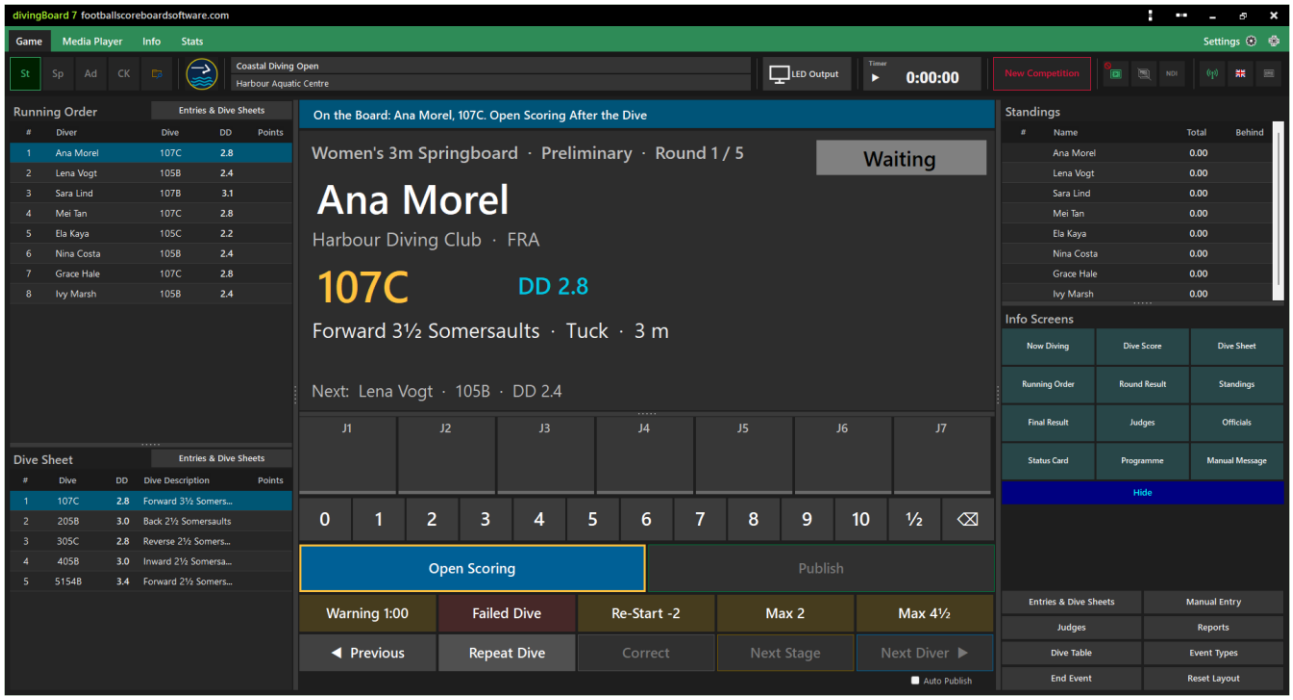



*Figure 4. The main window at the first start: the Game tab with the sample competition.*

A new installation starts with these settings:

| Setting | First Start Value |
|---|---|
| Board window | Left 0, Top 0, 960 × 540 pixels |
| Display mode | Standard (St) |
| Language | The language of the Windows regional format; English if it is not one of the 46 languages |
| Sample competition | Coastal Diving Open, Harbour Aquatic Centre: Women's 3m Springboard with eight fictional divers and seven judges |
| Background video | BlackRoyal.mp4 |
| Remote control | Off, PIN 123456 |
| Judge PINs | A random PIN per seat |
| Auto Publish | Off, delay 2 seconds |
| Keyboard shortcuts | Off (the default keys are already assigned) |
| NDI sender name | DV7_NDI |
| Licence | DEMO until a licence is entered (chapter 3) |

> **Note:** Run only one copy of divingBoard 7. The program does not stop a second copy; two copies would write the same settings and only one of them can use the remote control port.

## 2.4 Folders and Files

Everything lives in C:\divingBoard7:

| Folder or File | Contents |
|---|---|
| divingBoard7.exe and the .dll files | The program |
| start.xml | All settings, the keyboard keys, the judge PINs and the info-screen data (created at the first start) |
| config.xml, configSp.xml, configAd.xml, configCK.xml | Banner and Announce texts, Sponsored, Advertisement and Chroma Key settings |
| dv7license.xml | The PC licence |
| common\data | The running competition (competition.xml), the archive (competitions), the dive table (dives.xml, factory copy divesFactory.xml), the event types (events.xml), playlists and sponsors |
| common\font | The fonts of the boards |
| common\images | Pictures, language flags and country flags (flags\country, codes.csv) |
| common\remote | The remote control pages, the judge page and API_Commands.txt |
| common\vizrt\storage | The factory designs and your saved designs |
| common\vizrt\current | The designs in use |
| common\xml | Language file (lang.xml), factory copy (langFactory.xml), titles (title.xml) |
| media\videos, media\images | Background videos, sponsor and background pictures |
| logs | One log file per day, dv7_yyyy-MM-dd.log, kept for 14 days |
| API_Commands.txt | The HTTP API reference (Appendix B) |
| open_firewall_1907.bat, install_fonts.ps1 | Helpers to repeat the firewall and font steps of the setup |

The browser profile of the boards is kept per Windows user in %LOCALAPPDATA%\divingBoard7\WebView2.

## 2.5 Updating to a New Version

Install the new version over the old one. The setup closes the program, replaces the program files and the factory content, and keeps your data:

| Kept | Replaced |
|---|---|
| start.xml (settings, keys, judge PINs) and the licence | The program and its libraries |
| config.xml, configSp.xml, configAd.xml, configCK.xml | Factory images, fonts, remote pages and board scripts |
| The competition, the archive, your dive table, your event types, playlists and sponsors (common\data) | The factory dive table (divesFactory.xml) and the factory designs in common\vizrt\storage\St, Sp, Ad, CK |
| Your designs, the design list and the designs in use | langFactory.xml, this guide, API_Commands.txt |

| Kept | Replaced |
|---|---|
| Your translations (lang.xml) and titles (title.xml) | Factory media files with the same names |

At the next start the program brings your files up to date:

- New texts of the new version are added to lang.xml in all languages. Your own texts are never changed. The old file is kept once as lang.xml.bak_premigration; the additions are listed in lang.migration.log.
- Missing settings are added to start.xml. The old file is kept once as start.xml.bak_premigration.
- A board design that you never changed is replaced by the new factory design. A design you changed is kept.

> **Note:** Settings > Language > Set Factory Reset brings the new wording of existing texts, but it overwrites all languages at once, without a question (chapter 17).

## 2.6 Uninstalling

Use Apps & Features > Diving Scoreboard Software > Uninstall. The uninstaller removes the program, the logs, the downloads folder and the browser profile. The fonts and the firewall rules stay in Windows.

> **Note:** Before you uninstall, copy C:\divingBoard7 to a safe place if you want to keep your settings, competitions, designs and licence.

## 2.7 Quick Start: The First Competition

1. Start divingBoard 7. The Game tab shows the sample competition.
2. Put the board where the audience sees it: Settings > Screen Properties, set L, T, W and H to the position and size of the second monitor or LED output (chapter 7.2).
3. On the Game tab click New Competition, choose the Rule Set and the Event Type, and enter the title and the venue (chapter 6).
4. Open Entries and Dive Sheets and enter the divers and their dives, or import a CSV file (chapter 10).
5. Click Open Scoring. Type the awards into the judge tiles, or connect the judges' phones first (chapter 12).
6. Click Publish, then Next Diver (chapter 5.2). Use Correct if a published dive is wrong.
7. After the last dive click Finish, show the Final Result and print the reports (chapter 11).

For a TV production use the Chroma Key display mode (chapter 7.6); to run the desk from a phone switch the remote control on (chapter 14).

# 3. Licensing

## 3.1 PC Licence and USB Licence

divingBoard 7 runs with a licence key. There are two kinds:

| | PC Licence (CPU) | USB Licence |
|---|---|---|
| Bound to | This PC, through its Computer ID | One USB stick, through its USB ID |
| Key file | C:\divingBoard7\dv7license.xml | dv7license.xml in the root folder of the stick |
| Use | Only on this PC | On any PC where the stick is plugged in |
| Checked | At every program start | At every program start, before the PC licence |

The licence is read only when the program starts. After you enter a key, or plug in the USB stick, restart the program.

A key belongs to one product. A divingBoard 7 key has a model number from 270 to 275, shown in the ? License Info box; a key of another Board7 program does not work here.

The key also sets the largest board size (Max Resolution) and, for some licences, the GPU screen capture of the Advertisement and Chroma Key modes.

## 3.2 DEMO Mode

Without a valid licence the program runs in DEMO mode. Everything works, with these marks on the output:

- On the Standard, Sponsored, Advertisement and Chroma Key boards the clock and the diver's name read DEMO for one second in every ten.
- The info-screen board, the media-player board and the media area of the Advertisement board show a DEMO label.

The licence icon at the right of the menu bar shows the state. Rest the mouse on it for the tooltip: "No License", "USB License Found" or "CPU License Found".

## 3.3 The License Page

Open Settings > License.

| Control | What It Does |
|---|---|
| Computer ID icon | A question mark without a valid PC licence, a green tick with one. Click it to read the PC licence terms. |
| CPU ID | The Computer ID of this PC. Send it to the vendor to get a PC licence. |
| Copy | Copies the Computer ID to the clipboard. |
| License Key | Paste the key here. Lime = the key fits this PC; grey = it does not. |
| Create USB License | Opens the USB License Creator (section 3.5). |
| Save | Checks and saves the key. |

| Control | What It Does |
|---|---|
| ? (next to License) | License Info: validation, Max Resolution, expiry date, model, GPU and the result of the date check. |

The GPU badge appears when the licence enables GPU screen capture. The bottom of the page shows the support address and the program version (Version : 7.6.10.12).

## 3.4 Entering a PC Licence

1. Open Settings > License and click the copy button next to the Computer ID.
2. Send the Computer ID to the vendor (arslan.ziya@gmail.com) and order the licence.
3. Paste the key you receive into License Key. The box turns lime when the key fits this PC.
4. Click Save. The program shows "License Key Valid. Please Restart Application."
5. Restart divingBoard 7.

If the key does not fit, the program shows "License Key Not Valid!" and puts the saved key back.

> **Note:** Do not type into the License Key box of a licensed PC. A key that does not fit makes the running session unlicensed at once: the boards show DEMO until a valid key is back or the program restarts.

## 3.5 Creating a USB Licence

1. Plug any USB stick into the PC. Its size does not matter.
2. Open Settings > License > Create USB License.
3. Choose the stick in Select USB Device. The scan takes up to 8 seconds. A stick that already holds a key shows "- License Key Found".
4. Copy the USB ID and send it to the vendor.
5. Paste the key you receive into License Key and click Save. The key file is written to the stick.
6. Restart divingBoard 7 with the stick plugged in.

Esc or the close button leaves the USB License Creator. When a valid USB licence is found at start, the License page shows "USB License Detected" with the USB ID and the key.

## 3.6 When the Licence Is Not Accepted

| What You See | Reason and Fix |
|---|---|
| "License Key Not Valid!" | The key belongs to another PC or stick, or to another Board7 product. A PC key stops working after a hardware change; send the new Computer ID to support. |
| Computer ID shows ?WMI-UNAVAILABLE | Windows could not report the hardware data (WMI). Run winmgmt /verifyrepository as administrator and restart. A notice "License check unavailable – Windows WMI error" appears at start. |
| It worked before and now shows DEMO | The licence expired, or the PC clock is earlier than the last start. No message is shown: open the ? License Info box. Correct the Windows date and time, then restart. |
| USB licence not found | The stick must be plugged in before the program starts. |

The licence terms for both kinds open with the question-mark icons on the License page and in the USB License Creator.

# 4. Main Window and Menus

## 4.1 The Main Window

The main window is the operator's window. It starts maximised, leaves the Windows taskbar free, is an ordinary window (others can come in front of it) and cannot be made smaller than 1024 × 640 pixels. The editors it opens (Entries, Judges, Dive Table, Event Types, Reports, LED Output) are normal windows too: move, resize or maximise them. Esc or the X closes them and saves like their Close button. It has three parts: the title bar, the menu bar with the tabs, and the page of the selected tab.

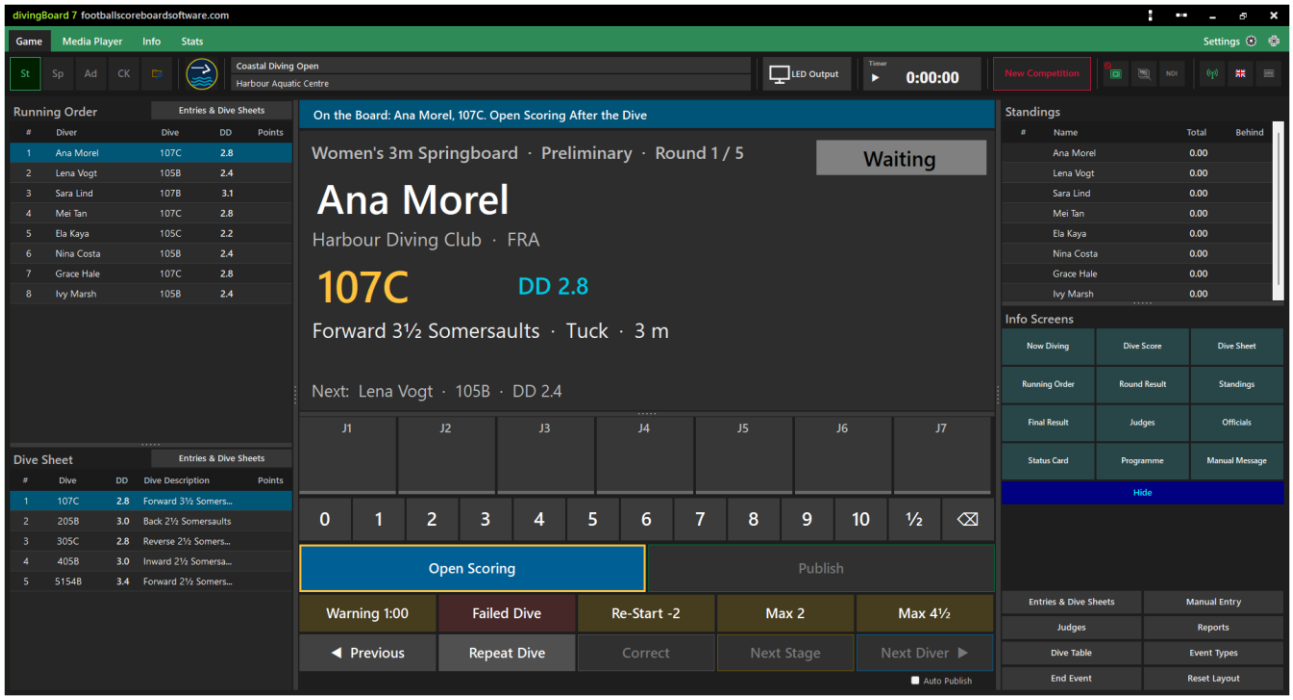



*Figure 5. The main window: title bar, menu bar and the Game tab.*

| Control | What It Does |
|---|---|
| Title | divingBoard 7 and the product website. Drag the title bar to move the window. |
| Column | Makes the window a full-height column, 1024 pixels wide, at the right edge of the screen. Click again for 1024 × 640. |
| Strip | Makes the window a full-width strip, 640 pixels high, along the bottom of the screen. Click again for 1024 × 640. |
| Minimise | Minimises the main window. The boards stay on. |
| Maximise | Fills the screen. Click again to go back. |
| Close | Closes the program after a question (section 4.5). |
| Game | The diving desk (chapter 5). |
| Media Player | Playlists of videos and pictures (chapter 13). |
| Info | Info screens, Banner, Announce and sponsors (chapters 9 and 13). |
| Stats | The results of the competition (chapter 11). |
| Settings | Licence, board position, designs, remote control, language (chapter 18). |

| Control | What It Does |
|---|---|
| Licence icon | Shows the licence state; rest the mouse on it for the text (chapter 3). |

- Drag any edge or corner to resize the window. The window snaps to the screen edges.
- In the Sponsored, Advertisement and Chroma Key display modes a fifth tab appears between Stats and Settings: Sp, Ad or CK. It opens the page of that mode (chapter 7). In Ad and CK the tab blinks while a camera, NDI source, screen capture or video plays there.
- While a video or a picture slideshow plays, the Settings tab shows the time left in the clip, for example ▶ 0:42.

## 4.2 Window Sizes

The Game tab uses the whole window: the desk grows with the window from 1024 × 640 up to a full screen. The column and the strip are useful when the main window shares the screen with other programs, for example a vision-mixer software.

## 4.3 The Tabs at a Glance

- Game: the diving desk, picture above.
- Media Player: the playlists (chapter 13.4).
- Info: the buttons of Banner, Announce and Sponsors and of the competition screens (chapter 9).
- Stats: the result table of a stage (chapter 11.1).
- Settings: the buttons of the settings pages (chapter 18).

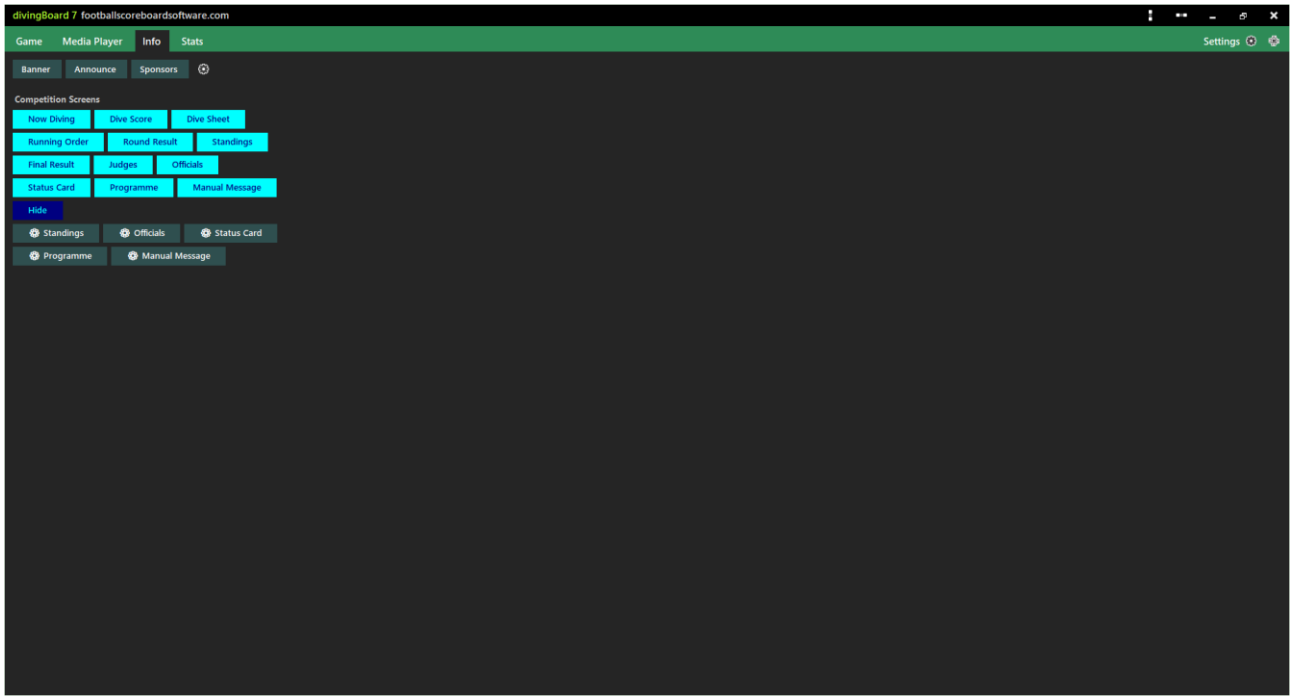



*Figure 6. The Info tab.*

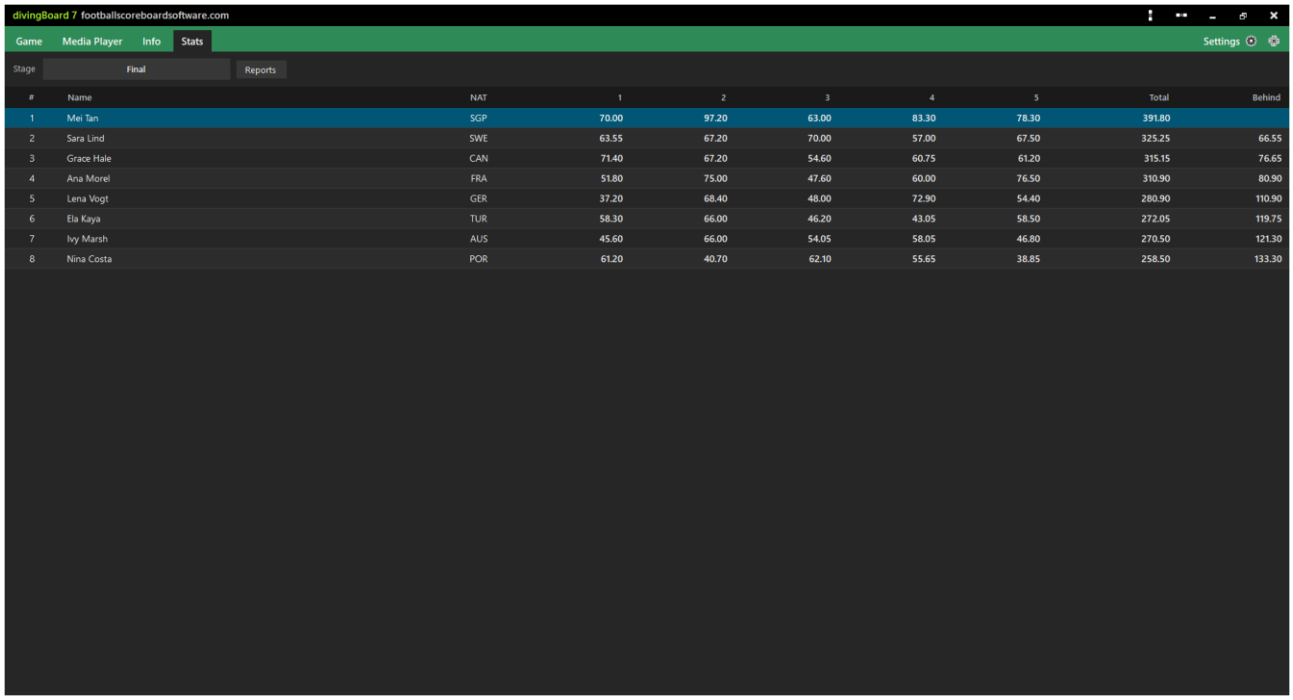



*Figure 7. The Stats tab.*

## 4.4 Board Windows

The boards are separate windows without a frame: one for the Standard and Sponsored board, one for Advertisement, one for Chroma Key, one for the info screens and one for the media player. Only the board of the current display mode is shown.

Their position and size are set in Settings > Screen Properties: L: Left, T: Top, W: Width and H: Height, in pixels of the Windows desktop (chapter 7). To show the board on a second monitor or LED controller output, set Left to the x position of that output in the Windows display layout, for example 1920 for a monitor to the right of a full-HD main screen.

## 4.5 Closing the Program

1. Click the Close button (X) in the title bar.
2. The program asks "The Application Will Be Closed! Are You Sure?". Click Yes.

The program saves the settings and the competition, stops the remote control and NDI and closes the boards. The competition is restored at the next start.

> **Note:** Always close divingBoard 7 with its own Close button. Closing the window from the Windows taskbar may skip the orderly shutdown.

## 4.6 Messages and Questions

Questions and messages of the program cover the page with a coloured title band (red for warnings) and Yes / No or Ok buttons. Esc answers No (or Ok). Short notices, for example about the remote control or NDI, appear for a few seconds at the bottom right of the screen.

# 5. The Diving Desk

## 5.1 The Game Tab at a Glance

The Game tab is the diving desk. It uses the whole window and grows with it: the buttons and fonts of the centre column scale from 1024 × 640 up to a full screen. On the left are the running order of the round and the dive sheet of the current diver, in the centre the current diver and the flow buttons, on the right the standings and the competition tools.

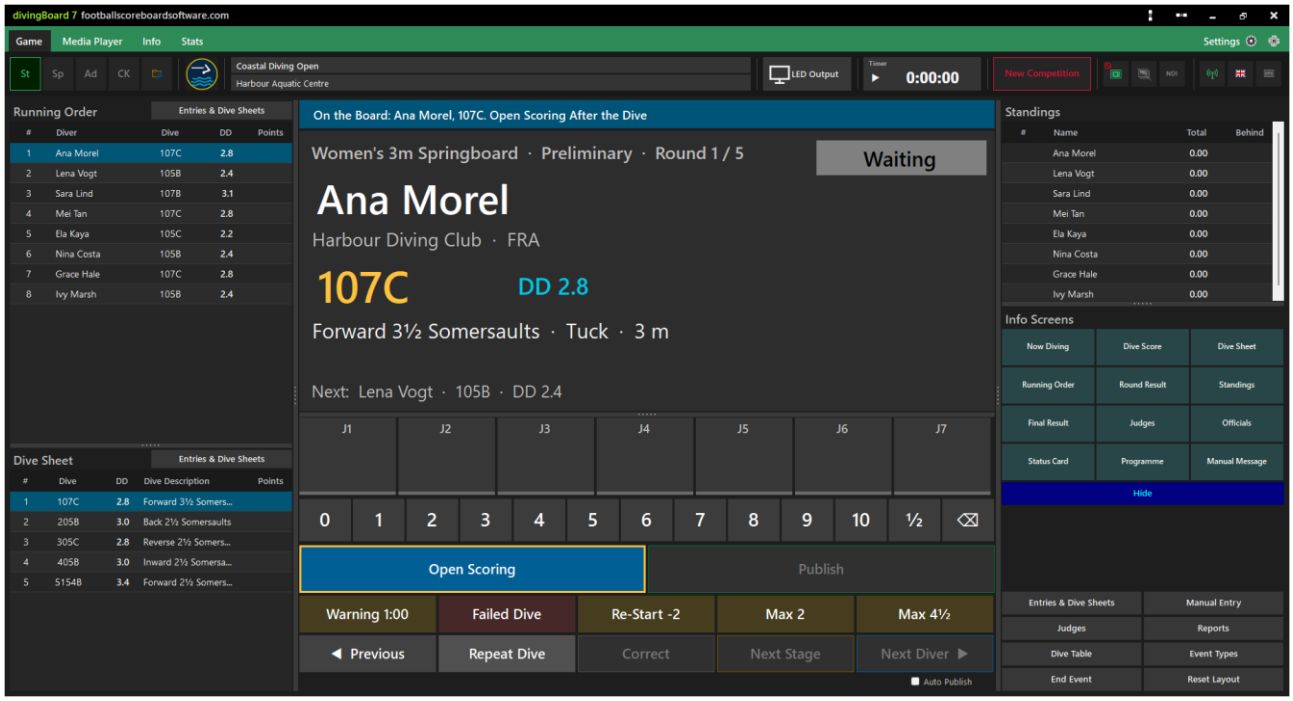



*Figure 8. The diving desk before scoring opens. The state tag at the top right of the card reads Waiting.*

The strip at the top holds the controls that work for the whole competition:

| Control | What It Does |
|---|---|
| St, Sp, Ad, CK | Switch the board display mode (chapter 7). The choice is saved and used at the next start. |
| Select Design (folder icon) | Opens the design gallery next to the button (chapter 8). |
| Logo | The logo of the board. |
| Title and Venue | The two text lines at the top of the board. New Competition fills them. |
| LED Output | Opens a window with Left, Top, Width and Height of the board output and one button per screen of this PC, which puts the board on that whole screen. It stays open beside the desk and the board follows every change at once. These are the same values as in Screen Properties (chapter 18.2). On a window narrower than 1200 pixels the button shows only its icon. |
| Clock | Timer, countdown or time of day (section 5.11). |
| New Competition | Opens the New Competition window (chapter 6). |
| Background video, middle image | Choose a video file (mp4, webm, ogg) or an image file for the board background. A small X on the icon removes the file. |
| NDI | Sends the board as an NDI stream (chapter 7.8). |

| Control | What It Does |
|---|---|
| Remote icon | Green while the remote control runs. A click opens Settings > Remote Control (chapter 14). |
| Language flag | Opens the language page (chapter 17). |
| Keyboard icon | Opens the Keyboard Hook Manager (chapter 16). Green while the shortcuts are on. |

The desk itself:

| Area | What It Shows |
|---|---|
| Guide bar | The next step of the rules (section 5.16). |
| Running Order | One row per entry of this round: order number, diver, dive, DD and points. The current diver is highlighted. A click on a row selects that diver. The Entries & Dive Sheets button above this list and above the Dive Sheet list, or a double click on a row, opens the entries with the current diver selected. A withdrawn entry is grey. |
| Diver card | Event, stage and round; the diver, the team and the country code; the dive number, the DD, the name of the dive with position and height; the next diver; the points. |
| State tag | Waiting (grey), Scoring Open (gold) or Published (green). |
| Judge tiles | One tile per judge seat: J1, J2 ..., in a synchronised event E1 ... and S1 .... The tiles wrap to two rows when they do not fit in one. |
| Award pad | 0 to 10, ½ and ⌫ (delete). |
| Flow buttons | Open Scoring, Publish; Warning 1:00, Failed Dive, Re-Start -2, Max 2, Max 4½; Previous, Repeat Dive, Correct, Next Stage, Next Diver. |
| Message line | The reason when the program refuses an action (section 5.12). |
| Auto Publish | The tick box at the bottom right of the centre column (section 5.9). |
| Standings | Rank, name, total and points behind the leader in this stage. |
| Tools | Entries and Dive Sheets, Manual Entry, Judges, Reports, Dive Table, Event Types, End Event, Reset Layout. |

## 5.2 The Flow of a Dive

Every dive goes through three states: Waiting, Scoring Open, Published. The operator confirms each dive by default.

1. The diver is on the board with the state Waiting. Click Open Scoring.
2. The judges give their awards on their phones (chapter 12), or you type them into the tiles.
3. The tiles fill and the card shows the sum and the points in grey. These are not official yet.
4. Click Publish. The points turn white, the state turns to Published, and the board shows the awards, the points, the total and the rank.

5. Click Next Diver. At the end of the running order the next round starts by itself.

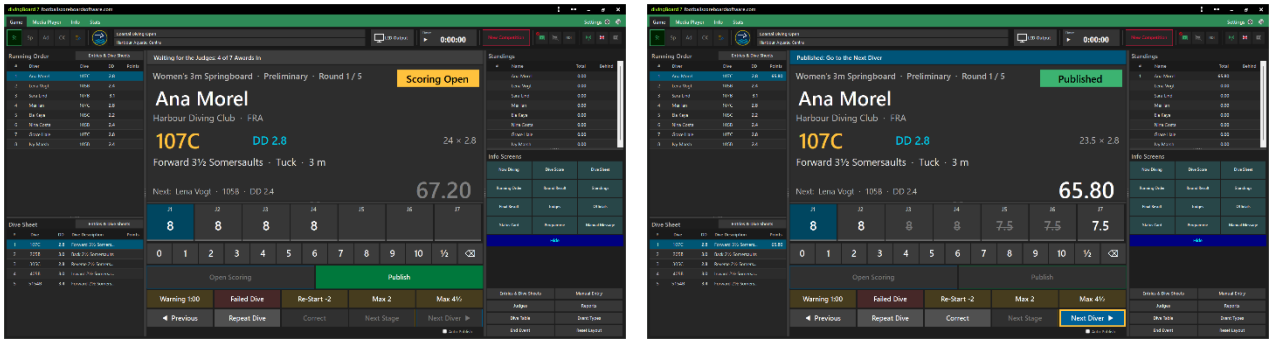



*Figure 9. Scoring open with four awards in (left). The published dive, with the cancelled awards in grey (right).*

Publish needs every award:

- All awards in: the dive is published at once.
- Some awards missing: the program asks "Awards Are Missing. Publish With the Rule's Average for the Missing Judges?". Click Yes only when a judge has really dropped out (section 5.5).
- No award at all: the program refuses. Only a Failed Dive can be published without awards.

## 5.3 Entering Awards at the Desk

The tiles accept awards whether or not the judges have phones. Awards go from 0 to 10 in half points. You can mix phones and desk entry: a value you type replaces the value in that tile, and a phone can change it again until you publish.

With the award pad:

1. Click a tile. It turns blue.
2. Click the award on the pad. The tile takes the value and the blue mark moves to the next judge.
3. For a half point click ½ right after the number: 7, then ½ gives 7.5.
4. ⌫ clears the marked tile.

With the keyboard:

1. Click a tile and type the award, for example 7.5 or 7,5.
2. Press Enter. The cursor goes to the next tile.

Empty a tile and leave it to clear its award. The tiles accept input only while scoring is open.

> **Note:** Do not type awards with the numeric keypad while the keyboard shortcuts are on. The keypad keys also run their shortcut, so Num 7 types a 7 and switches Failed Dive on (chapter 16.3). Use the award pad, or the digits above the letters.

## 5.4 The Penalties

The four penalty buttons record the decision of the referee. A click switches the penalty on (the button turns red), a second click switches it off. You can set them before or after the awards, and also after publishing: a published dive is calculated again at once. The program never decides a penalty by itself.

| Button | Effect |
|---|---|
| Failed Dive | The dive scores 0 points. It can be published without awards. |
| Re-Start -2 | 2 points are taken from each award, not below 0. |

| Button | Effect |
|---|---|
| Max 2 | No award counts for more than 2 points. |
| Max 4½ | No award counts for more than 4.5 points. |

The penalty text appears on the card, on the board, on the judges' phones and in the reports. With Max 2 or Max 4½ on, the phones of the judges disable the higher awards.

In synchronised events the dive also fails when all execution judges of one diver, or all synchronisation judges, give zero.

## 5.5 How the Points Are Calculated

Points = the awards that count × the degree of difficulty, rounded to two decimals.

Individual events: the same number of awards is cancelled at each end and the rest are added. The number comes from the event type (Cancelled at Each End, chapter 6.3): 2 with 7 judges, 1 with 5 judges, 0 with 3 judges in the factory presets.

Example with 7 judges and DD 2.8: the awards 8, 8, 8, 8, 7.5, 7.5, 7.5 lose the two highest and the two lowest. 8 + 8 + 7.5 = 23.5, and 23.5 × 2.8 = 65.80.

Synchronised events with 11 judges: the highest and the lowest are cancelled in each of the three groups (execution diver 1, execution diver 2, synchronisation). The remaining five awards are added, divided by 5 and multiplied by 3.

Synchronised events with 9 judges: the highest and the lowest of the four execution awards together, and of the five synchronisation awards, are cancelled. The remaining five are added, divided by 5 and multiplied by 3.

A missing award: the average of the other judges of the same group stands in for it, rounded as the rules say. .01 to .24 is dropped, .25 to .74 becomes .5, .75 and more becomes the next whole point.

Equal totals share a rank.

> **Note:** A team event uses the synchronised formula for a synchronised round only when its panel has 9 or 11 judges. The factory Mixed Team Event has 7 judges, so its synchronised rounds are scored like individual rounds (Appendix A).

## 5.6 Correct and Repeat

Correct is for a mistake at the desk. It takes a published dive back to Scoring Open, and its awards stay in the tiles. Change the wrong award, or ask the judge to send it again, and click Publish. To correct an earlier dive of this round, click its row in the running order. For an earlier round, go back with Previous.

Repeat Dive is the referee's decision that the diver dives again. The program asks "Repeat This Dive? Its Awards Are Cleared.". The awards, the penalties and the points are removed and the dive goes back to Waiting.

## 5.7 Moving Through the Running Order

- Next Diver is available after the dive is published, or when the entry has no dive for this round. It skips withdrawn entries. After the last diver of a round it goes to the first diver of the next round.
- Previous goes back the same way, also into the previous round. It stops at the first dive of the stage.
- A click on a row of the running order selects any diver of the current round.

At the end of the last round Next Diver shows "End of This Stage: Use Next Stage".

## 5.8 Stages

An event has one or more stages, for example Preliminary, Semi-Final and Final. The event type sets them (chapter 6.4). Next Stage becomes active when every entry that has not withdrawn has a published dive in every round of the stage.

1. Click Next Stage. The program asks "Close This Stage and Go to the Next One?".
2. The top of the ranking goes on, as many as the stage's Advance value says. Divers with an equal rank go on together. Advance 0 means everybody goes on.
3. The running order of the new stage is the reverse of the ranking: the leader dives last.

What happens to the points depends on the stage:

- Keep Total off (World Aquatics): the new stage starts from zero and uses all rounds of the event again. The dive list goes along with the diver; change it in Entries and Dive Sheets if the diver changes dives.
- Keep Total on (11-dive meets): the new stage continues the total and uses the next rounds of the event. These dives must be on the sheet.

On the last stage the button reads Finish. It asks "Finish the Competition?" and the board status changes to Final Result. If a dive must be corrected after that, use Correct and click Finish again.

## 5.9 Auto Publish

Tick Auto Publish at the bottom right of the centre column. When all awards are in, or Failed Dive is on, the dive is published after a delay. Set the delay in the Judges window, Auto Publish Delay (Seconds), 0 to 30, default 2 (chapter 12.2).

- Auto Publish never publishes with a missing award.
- It does not move to the next diver: Next Diver stays with the operator.
- Every award that changes during the delay still counts, because the dive is calculated at the moment of publishing.
- A dive it published can be taken back with Correct, as usual.

## 5.10 What the Board Shows

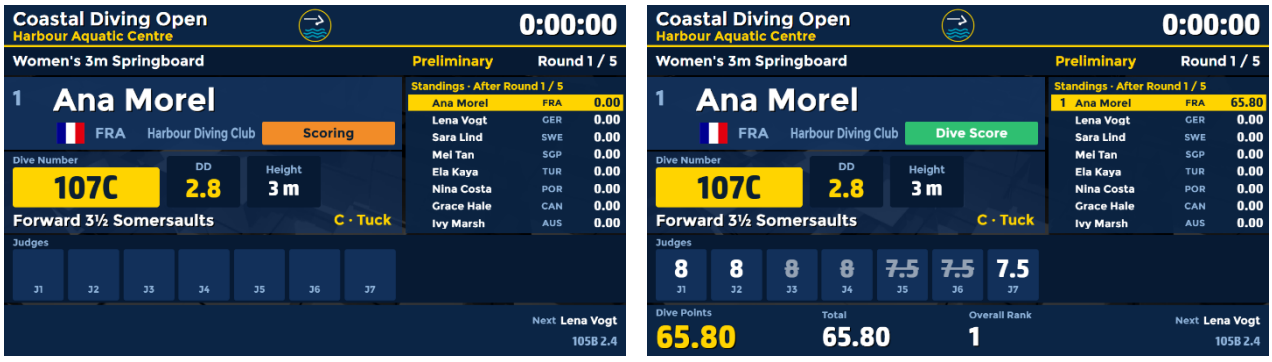



*Figure 10. The board with scoring open (left) and after Publish (right).*

- Before Publish the board does not show the awards. A judge's box lights up when the award is in, and the status line reads Scoring.

- After Publish the board shows the awards with the penalties applied, the cancelled ones dimmed and crossed out (the line can be switched off: Settings, Line Through Cancelled Awards), and the points, the total and the rank.
- The leader list shows the top eight of the stage, with the current diver highlighted. The next diver and dive are at the bottom.
- After Publish a notice appears for six seconds when there is something to say: Failed Dive, Perfect Dive (every award is a 10) or New Leader (from the second round on).

## 5.11 The Clock

The clock box in the top strip has three modes: Timer, Countdown and Time (time of day).

- Right click the clock or its mode label to go to the next mode. A new mode starts stopped at zero.
- The clock never starts by itself. Play / Pause starts and pauses it. In the time-of-day mode the button is hidden.
- To set the time, click in the clock, type the time (h:mm:ss, mm:ss or seconds) and press Enter. Wrong input is ignored.
- A countdown stops at zero by itself.
- The board shows whatever the desk shows.
- The clock value is saved. After a restart a running clock continues from the saved time; the time while the program was closed is not counted.
- Creating a competition or clearing its scores sets the clock back to zero.

## 5.12 Messages on the Desk

| Message | Meaning |
|---|---|
| No Entries: Open Entries and Dive Sheets | The competition has no entries yet (chapter 10). |
| No Dive on the Sheet for This Round | This entry has no dive for the round. Enter it, or click Next Diver to go on. |
| No dive selected | The current entry has no dive for this round. |
| Scoring is not open | Click Open Scoring first. |
| Awards go from 0 to 10 in half points | The value in the tile is not valid. |
| No awards yet | Publish was clicked before any award came in. |
| Waiting for awards | An award is missing (remote or HTTP API; the desk asks instead). |
| This dive is already published | Use Correct to change it. |
| End of This Stage: Use Next Stage | The last dive of the stage is done. |

## 5.13 A Typical Competition

1. Click New Competition, choose the event type, and enter the title and the venue (chapter 6).
2. Open Entries and Dive Sheets and enter the divers and their dives, or import a CSV file (chapter 10).
3. Open Judges, enter the names and connect the phones (chapter 12).
4. For every dive: Open Scoring, the awards, the referee's penalties if any, Publish, Next Diver.

5. At the end of a stage: Next Stage. At the end of the competition: Finish.
6. Show the Final Result (chapter 9) and print the reports (chapter 11).

The competition is saved after every action, so a restart or a crash loses nothing.

## 5.14 Remote and Keyboard Equivalents

| Action | Keyboard | Remote Page | HTTP API |
|---|---|---|---|
| Open Scoring | Num 0 | Open Scoring | open_scoring |
| Award for a seat | – | Tap the seat | award |
| Publish | Num Enter | Publish | publish |
| Next Diver | Num 6 | Next Diver | next_diver |
| Previous | Num 4 | Previous | prev_diver |
| Failed Dive | Num 7 | Failed Dive | penalty Failed |
| Re-Start -2 | Num 8 | Re-Start -2 | penalty Restart |
| Max 2 | Num 9 | Max 2 | penalty Max2 |
| Max 4½ | Num + | Max 4½ | penalty Max45 |
| Correct | Num – | Correct | reopen |
| Repeat Dive | – | – | repeat |
| Next Stage / Finish | – | Next Stage / Finish | next_stage |
| Auto Publish | – | Setup tab | auto_publish |
| Clock Play / Pause | Num / | Setup tab | click playpause |

## 5.15 Arranging the Desk

Drag the bars between the areas to give each one the room you need:

- The two upright bars set the width of the left and right columns.
- The bar under the running order divides it from the dive sheet.
- The bar under the diver card divides the card from the judges' tiles and the buttons. Both sides scale their contents to the room they get.
- Drag the line between two column headers in any grid to change the width of that column.

The desk remembers all of this at the next start. Reset Layout, at the bottom right, puts the bars and the column widths back to the factory layout. The editors keep their own splitters and column widths the same way.

## 5.16 The Guide Bar

The bar over the diver always says what comes next under the rules, and the button that does it has a gold frame: open scoring after the dive, wait for the awards, publish, next diver, next stage, finish, print the reports. Before the first dive it also names what is still missing (dive sheets, referee, judges' names). Blue is the next action, grey means waiting for the judges, gold needs your attention, green means the competition is finished.

## 5.17 When the Rules Step In

| Situation | What to do | What the program does |
|---|---|---|
| A diver does not dive after the referee's warning | **Warning 1:00** | Counts the minute (article 8.5.5). At zero, press Failed Dive and Publish |
| Refused or failed dive | **Failed Dive**, then **Publish** | No scoring needed, 0 points |
| Dive repeated by the referee | **Repeat Dive** | The first awards leave the results but stay in the report for an appeal (8.4.4, 8.4.5) |
| The majority of the judges call the dive unsafe | The guide asks for **Max 2** | Each judge's phone has an Unsafe Dive button (10.5.4.2) |
| A diver cannot start or leaves | Entries, column **Status**: DNS, WD or DSQ | No rank, skipped in the running order. Before a stage starts, the next ranked comes in; all of them when tied (4.1.12) |
| Equal totals at the end of a stage | **Next Stage** | All tied entries on the last place go through, the order between equal totals is drawn by lot and shown (4.1.8, 4.1.9) |
| The event cannot continue | **End Event** | Results count up to the last completed round (8.4.2.2), the reports say so |

## 5.18 Manual Entry

**Manual Entry** stays open beside the desk. **This Dive** changes the number, position or degree of difficulty of the current dive. **Points by Hand** types the points of a dive when there are no awards; the report marks them By Hand. **Message on the LED** puts any heading, name, lines and big value on the board with **Show on LED**.

# 6. Competitions, Event Types and Dive Table

## 6.1 New Competition

A competition is one event: its entries, dive sheets, judges and scores. Click New Competition in the top strip of the Game tab.

| Field | What It Does |
|---|---|
| Rule Set | World Aquatics, US High School (NFHS), US College (NCAA) or Custom. It filters the list below. The age groups are listed under World Aquatics. |
| Event Type | The event of the competition. |
| Competition Title, Venue | The two text lines of the board and the heading of the reports. |
| Date | Today by default. Free text, printed on the reports. |
| Referee | Printed on the reports and shown on the Judges screen. |
| Archive | The competitions stored so far, newest first. |

To start a competition:

1. Choose the Rule Set and the Event Type.
2. Fill in the title, the venue, the date and the referee.
3. Click Create Competition. The program asks "Create a New Competition? The Current One Goes to the Archive.".

The new competition has no entries. It keeps the title, the venue, the referee and the names of the judges. Then enter the divers (chapter 10) and check the judges (chapter 12).

> **Note:** To change the event, always create a new competition. A competition keeps its own copy of the event type, so later changes in the Event Types editor do not reach it.

## 6.2 The Archive

The running competition is saved after every action in common\data\competition.xml. The archive is in common\data\competitions, one file per stored competition, named with the date, the time and the title.

| Button | What It Does |
|---|---|
| Create Competition | Stores the current competition in the archive and starts the new one. |
| Open From Archive | Stores the current competition in the archive and opens the one selected in the list. |
| Clear the Scores | Asks "Start the Scores of This Competition Again?", stores the current state in the archive, and sets every dive back to Waiting. The entries and the sheets of the first stage and of Keep Total stages stay. The competition goes back to the first stage. |
| Cancel | Closes the window. |

## 6.3 Event Types

The list on the left can be narrowed by rule set. The line above the fields sums the type up, or says what is wrong with it. Rounds and stages have their own grids; First Round and Rounds only open for a stage with Keep Total ticked.

The Event Types button in the tools on the Game tab opens the list of event types. The factory list is ready to use and every value can be edited.

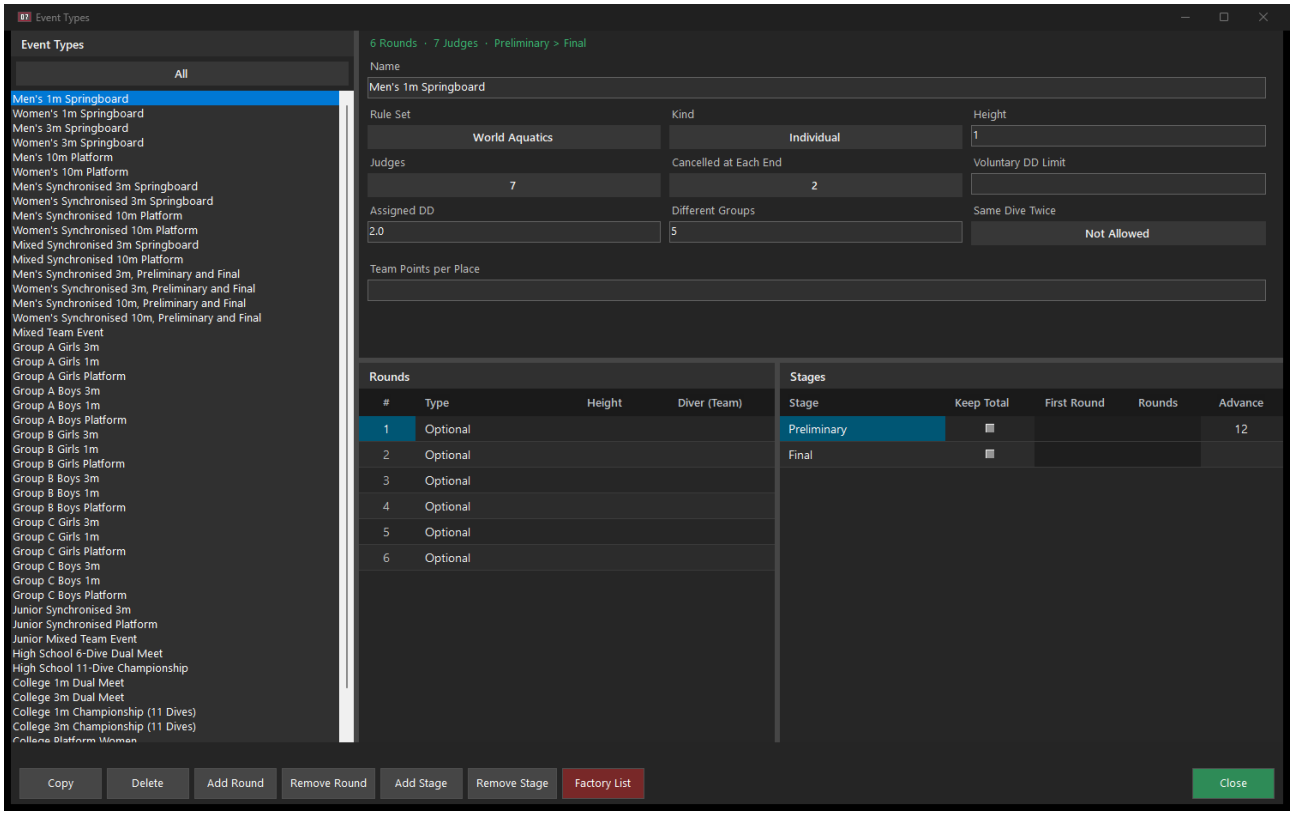



*Figure 11. The Event Types editor.*

| Field | Values | What It Does |
|---|---|---|
| Name | Text | The name on the board and in the reports. |
| Rule Set | World Aquatics, NFHS, NCAA, Custom | The list in New Competition, and the first choice in Reports. |
| Kind | Individual, Synchronised, Team | Synchronised entries have a Partner; team entries name the diver of each round. |
| Height | Text, for example 3 or 7.5 | The height of the event in metres. A round can have its own. |
| Judges | 3, 5, 7, 9, 11 | The size of the panel. Synchronised events use 9 or 11. |
| Cancelled at Each End | 0 to 4 | Awards cancelled at each end in individual and team rounds. At least one award must remain. |
| Voluntary DD Limit | Number, empty = none | The largest total DD of the Limited rounds. |

| Field | Values | What It Does |
|---|---|---|
| Assigned DD | Number | The fixed DD of the Assigned rounds, 2.0 by default. |
| Different Groups | Number, empty = no check | How many dive groups the list must use. |
| Same Dive Twice | Not Allowed, Allowed | Whether a dive number may appear twice on a sheet. |
| Team Points per Place | Numbers, for example 5,3,1 | The points per place for the team scores of the Meet Results report. |

The buttons:

| Button | What It Does |
|---|---|
| Close | Checks all event types, saves them and closes. If a type is not valid, the reason appears and the type is selected. |
| Copy | Makes a copy of the selected type. Use it to make your own version and keep the factory one. |
| Delete | Deletes the selected type after a question. |
| Add Round, Remove Round | Adds a round at the end, or removes the last one. |
| Add Stage, Remove Stage | Adds a stage at the end, or removes the last one. |
| Factory List | Brings back the factory list after a question. Your changes are lost. |

Your event types are stored in common\data\events.xml.

## 6.4 Rounds and Stages

The Rounds table has one row per round of the event:

| Column | What It Does |
|---|---|
| Type | Free (an optional dive, no limit), Limited (a voluntary dive, counts towards the Voluntary DD Limit), Assigned (fixed DD, the Assigned DD value). The dive sheet calls them Optional, Voluntary and Assigned. |
| Height | Empty = the event height. Fill it in for a round at another height. |
| Diver (Team) | Team events: F female, M male, S synchronised pair. |

The Stages table has one row per stage:

| Column | What It Does |
|---|---|
| Stage | The name: Preliminary, Semi-Final, Final or any text. |

| Column | What It Does |
|---|---|
| First Round, Rounds | With Keep Total: the first round of this stage and how many it uses. Without Keep Total these columns stay empty. |
| Advance | How many go on to the next stage; empty = all. |
| Keep Total | 1 = the stage continues the total of the stage before and uses only its slice of the rounds. Empty = the stage starts from zero and uses all rounds of the event again. |

World Aquatics events start each stage from zero. The 11-dive meets keep the total, for example rounds 1-5, 6-8 and 9-11.

## 6.5 The Factory Event Types

World Aquatics (Competition Regulations Part Four, in force from February 2026). 7 judges, two awards cancelled at each end:

| Event | Height | Dives | Different Groups | Stages (Advance) |
|---|---|---|---|---|
| Men's 1m Springboard | 1 | 6 | 5 | Preliminary (12), Final |
| Women's 1m Springboard | 1 | 5 | 5 | Preliminary (12), Final |
| Men's 3m Springboard | 3 | 6 | 5 | Preliminary (18), Semi-Final (12), Final |
| Women's 3m Springboard | 3 | 5 | 5 | Preliminary (18), Semi-Final (12), Final |
| Men's 10m Platform | 10 | 6 | 6 | Preliminary (18), Semi-Final (12), Final |
| Women's 10m Platform | 10 | 5 | 5 | Preliminary (18), Semi-Final (12), Final |
| Mixed Team Event | 3 and 10 | 6 | 6 | Final |

Synchronised events: 11 judges, 5 different groups, Final only. The first two dives are Assigned.

| Event | Height | Dives |
|---|---|---|
| Men's Synchronised 3m Springboard, 10m Platform | 3, 10 | 6 (2 Assigned + 4 Free) |
| Women's Synchronised 3m Springboard, 10m Platform | 3, 10 | 5 (2 Assigned + 3 Free) |

| Event | Height | Dives |
|---|---|---|
| Mixed Synchronised 3m Springboard, 10m Platform | 3, 10 | 5 (2 Assigned + 3 Free) |
| Junior Synchronised 3m, Platform (9 judges, 4 groups) | 3, 10 | 5 (2 Assigned + 3 Free) |

Age groups: 5 judges, one award cancelled at each end, Final only. Voluntary DD Limit 9.0 at 1 m, 9.5 at 3 m and 7.6 on the platform. Different Groups 5, except 6 for Group A Boys Platform and no check on the Group C platforms. Limited + Free dives:

| Group | 1m and 3m | Platform |
|---|---|---|
| Group A Girls | 5 + 4 | 4 + 4, 10 m |
| Group A Boys | 5 + 5 | 4 + 5, 10 m |
| Group B Girls | 5 + 3 | 4 + 3, 10 m |
| Group B Boys | 5 + 4 | 4 + 4, 10 m |
| Group C Girls | 5 + 2 | 4 + 2, 7.5 m |
| Group C Boys | 5 + 3 | 4 + 3, 7.5 m |

US high school and college:

| Event | Height | Judges, Cancelled | Dives | Limit | Stages (Advance) | Team Points |
|---|---|---|---|---|---|---|
| High School 6-Dive Dual Meet | 1 | 3, 0 | 1 Limited + 5 Free | – | Final | 5,3,1 |
| High School 11-Dive Championship | 1 | 5, 1 | 5 Limited + 6 Free | 9.0 | Preliminary 1-5 (20), Semi-Final 6-8 (16), Final 9-11 | Championship |
| College 1m / 3m Dual Meet | 1, 3 | 3, 0 | 6 Free | – | Final | 9,4,3,2,1 |
| College 1m Championship (11 Dives) | 1 | 7, 2 | 5 Limited + 6 Free | 9.0 | Preliminary 1-6 (16), Final 7-11 | Championship |
| College 3m Championship (11 Dives) | 3 | 7, 2 | 5 Limited + 6 Free | 9.5 | Preliminary 1-6 (16), Final 7-11 | Championship |
| College Platform Women | 10 | 7, 2 | 4 Limited + 4 Free | 7.6 | Preliminary 1-4 (16), Final 5-8 | Championship |

| Event | Height | Judges, Cancelled | Dives | Limit | Stages (Advance) | Team Points |
|---|---|---|---|---|---|---|
| College Platform Men | 10 | 7, 2 | 4 Limited + 5 Free | 7.6 | Preliminary 1-5 (16), Final 6-9 | Championship |

Championship team points: 20,17,16,15,14,13,12,11,9,7,6,5,4,3,2,1.

Custom Event: 3 m, 5 judges, one award cancelled at each end, 6 Free dives, Final only. Use it as a starting point.

## 6.6 Check the US Presets Before You Use Them

> **Note:** The US presets are a starting point, not a statement of the rules. Check them against the current NFHS rule book, the current NCAA rule book and your state or conference rules before a meet, and change them in the Event Types editor where they differ.

The numbers of dives, the 9.0, 9.5 and 7.6 limits, the advance counts and the team points come from the NFHS score sheet and from public summaries, not from the current rule books. State and conference rules differ. The US DD tables may also differ from the World Aquatics table that the program ships: check the DD of the dives you use.

## 6.7 Dive Numbers

A dive number has three or four digits and a letter for the position, for example 107C or 5253B.

| Group | First Digit | Pattern | Example |
|---|---|---|---|
| Forward | 1 | Group, flying (1 or 0), half somersaults | 107C = Forward 3½ Somersaults, Tuck |
| Back | 2 | The same | 205B = Back 2½ Somersaults, Pike |
| Reverse | 3 | The same | 303B = Reverse 1½ Somersaults, Pike |
| Inward | 4 | The same | 405C = Inward 2½ Somersaults, Tuck |
| Twisting | 5 | Group, direction, half somersaults, half twists | 5253B = Back 2½ Somersaults 1½ Twists, Pike |
| Armstand | 6 | Group, direction, half somersaults, half twists if any | 6245 = Armstand Back 2 Somersaults 2½ Twists |

- The direction of groups 5 and 6 is 1 forward, 2 back, 3 reverse, 4 inward.
- In a four-digit number of groups 1 to 4 the last two digits are the half somersaults: 1011 is Forward 5½ Somersaults.
- Positions: A Straight, B Pike, C Tuck, D Free.

The program builds the name of the dive from the number, in the program language.

## 6.8 The DD Formula

The degree of difficulty (DD) follows the formula of the World Aquatics rules (Appendices 8 and 10, in force from February 2026):

```
DD = A + B + C + D + E
```

| Part | Meaning |
|---|---|
| A | Somersaults: depends on the number of somersaults and the height |
| B | Flight position: straight, pike, tuck, free, and flying |
| C | Twists |
| D | Approach |
| E | Unnatural entry |

Example, 5253B from 3 m: A 2.2 + B 0.3 + C 0.7 + D 0.2 + E 0 = 3.4.

## 6.9 The Factory Dive Table

The program ships a table for the heights 1, 3, 5, 7.5 and 10 m with the 1996 cells of Appendices 9 and 11 of the rules. A cell with no dive means the dive is not possible in that position from that height.

- The value printed in the rules comes first. The formula fills the cells the rules leave empty.
- The formula gives the printed value in every cell except a few that the rules print differently (208 at 5 m, 5172 at 5 m, 5237, 5239 and 5339 at 1 m, 610 B and C, 6241 B and C). The table holds the printed value.
- The table covers the World Aquatics values only. There are no factory values for high diving.

## 6.10 Editing the Dive Table

The boxes above the table narrow the list: Find (a number or a word of the name), Height and Group. A value that differs from the factory table is shown in gold.

The Dive Table button in the tools on the Game tab opens the table: one row per dive and height, with the DD of each position.

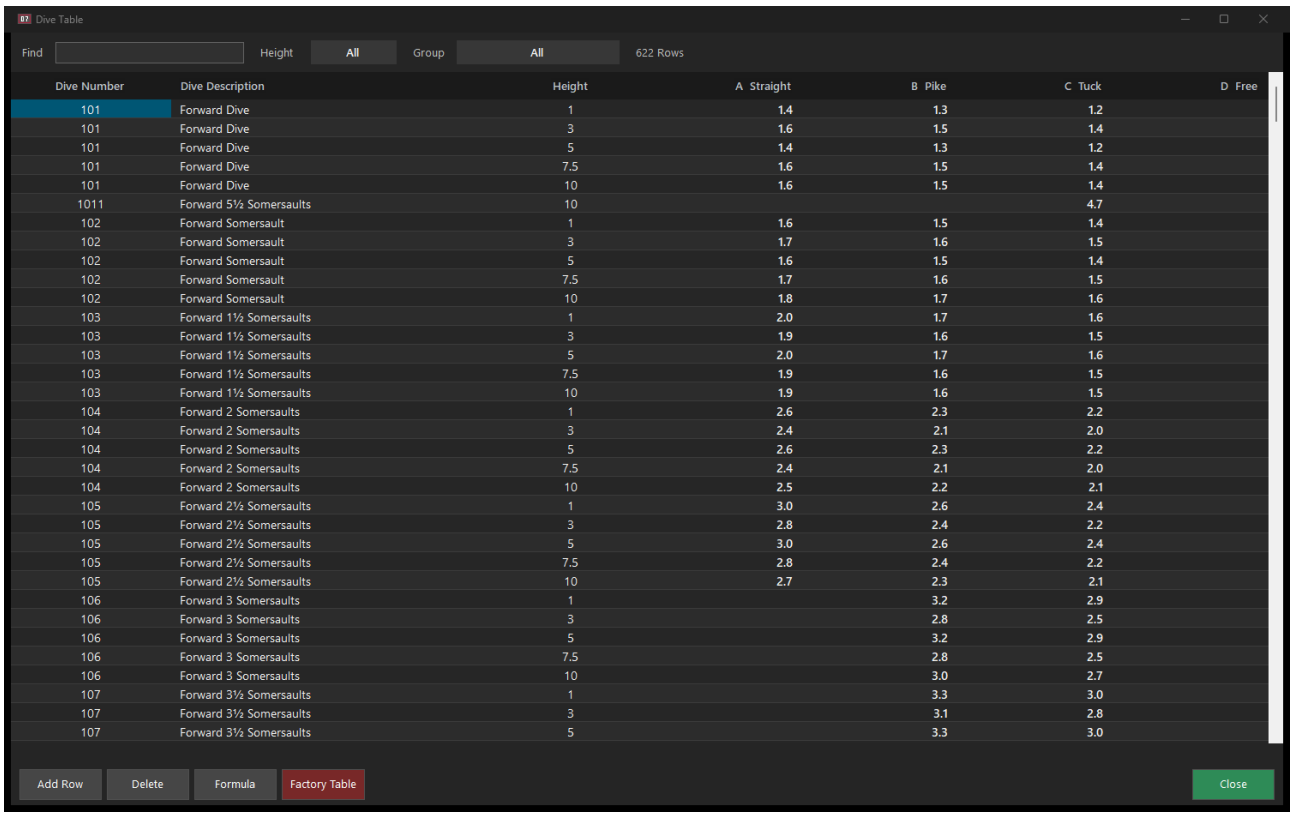



*Figure 12. The Dive Table editor.*

| Control | What It Does |
|---|---|
| Find | Filters by dive number or name. |
| Cells | Click and type. A DD is a number above 0; an empty cell means the dive does not exist in that position. |
| Dive Description | Your own text replaces the name built from the number. |
| Add Row | Adds an empty row for a new dive or a new height. |
| Delete | Deletes the selected row after a question. |
| Formula | Fills the selected row from the formula. It works only for 1, 3, 5, 7.5 and 10 m. |
| Factory Table | Brings back the factory table after a question. Your changes are lost. |
| Close | Saves the table and closes. |

Your table is stored in common\data\dives.xml.

> **Note:** The dive sheets keep the DD they were entered with. A change in the table reaches a sheet only when you enter that dive again.

## 6.11 Adding High Diving Heights

High diving is added by the customer: a height is free text, and the program has no factory DD for 20 m or 27 m.

1. Open the Dive Table and click Add Row.

2. Type the dive number, and the height as a plain number, for example 20 or 27. The height must be written the same way in the table and in the event type: 20, not 20 m.
3. Type the DD of each position from the rules of your competition. Repeat for every dive.
4. Click Close.
5. Open Event Types, select a type and click Copy. Set the Name, the Height, the judges and the rounds, and click Close.
6. Create a competition with the new type.

> **Note:** Do not use Formula on a high diving row. The formula has no values for these heights and empties the row.

# 7. Display Modes and Board Output

## 7.1 The Four Display Modes

| Mode | Use | Output | Page |
|---|---|---|---|
| St, Standard | Full-screen scoreboard on a screen, projector or LED wall | The board window | – |
| Sp, Sponsored | Standard scoreboard with a sponsor band | The board window, split into scoreboard and band | Sp tab |
| Ad, Advertisement | Scoreboard column, banners and a large area for video, camera or screen capture | The Ad board window | Ad tab |
| CK, Chroma Key | Scorebug and lower thirds on a key colour for a vision mixer | The CK board window | CK tab |

Switch the mode with the St, Sp, Ad and CK buttons on the Game tab, or with the remote control. The choice is saved and comes back at the next start. In Sp, Ad and CK a fifth tab with the same name appears in the menu bar; it opens the page of that mode.

When you leave Ad or CK, every source running there (video, camera, NDI input, screen capture) stops. The setting Source on mode switch (section 7.7) can restart it when you come back.

## 7.2 Board Position and Size

The boards use the position and size of Settings > Screen Properties:

| Row | Meaning | Default |
|---|---|---|
| L: Left | Board window x position in pixels of the Windows desktop | 0 |
| T: Top | Board window y position | 0 |
| W: Width | Board width in pixels; not more than Max Resolution | 960 |

| Row | Meaning | Default |
|---|---|---|
| H: Height | Board height in pixels; not more than Max Resolution | 540 |
| Max Resolution | The largest size the licence allows (read only) | From the licence |
| Background Video Opacity | 0-10: how strongly the background video shows behind the board | 6 |

A change is saved at once and the board moves or resizes immediately. The window may be larger than the screen it is on (up to 8192 × 8192 pixels), for example when an LED controller expects a larger picture.

All factory boards scale with the window. Text, digits and plates keep their proportions on 16:9, 4:3, 5:4 and wide LED strips.

What the board shows and hides by itself:

- A judge's box appears only for the seats of the panel: 3, 5, 7, 9 or 11 boxes.
- The awards appear after Publish; before that a box only lights up when the award is in (chapter 5.10).
- Empty country codes, flags and teams are hidden.
- The points, total and rank appear only when there is something to show. The total and rank need one published dive.
- The penalty text appears only when a penalty is set.
- The status line appears only when it matters: Scoring, Failed Dive, and Final Result at the end.
- The notice band shows Failed Dive, Perfect Dive or New Leader for six seconds after Publish.
- A long name is condensed to fit its box.

## 7.3 Standard (St)




*Figure 13. The Standard board with scoring open.*

The Standard board needs no page of its own: everything is on the Game tab. Its look comes from the selected design (chapter 8).

## 7.4 Sponsored (Sp)

The Sponsored board is the Standard board with a sponsor band at the bottom or the top. The band shows the sponsor images sliding through, or a scrolling text.

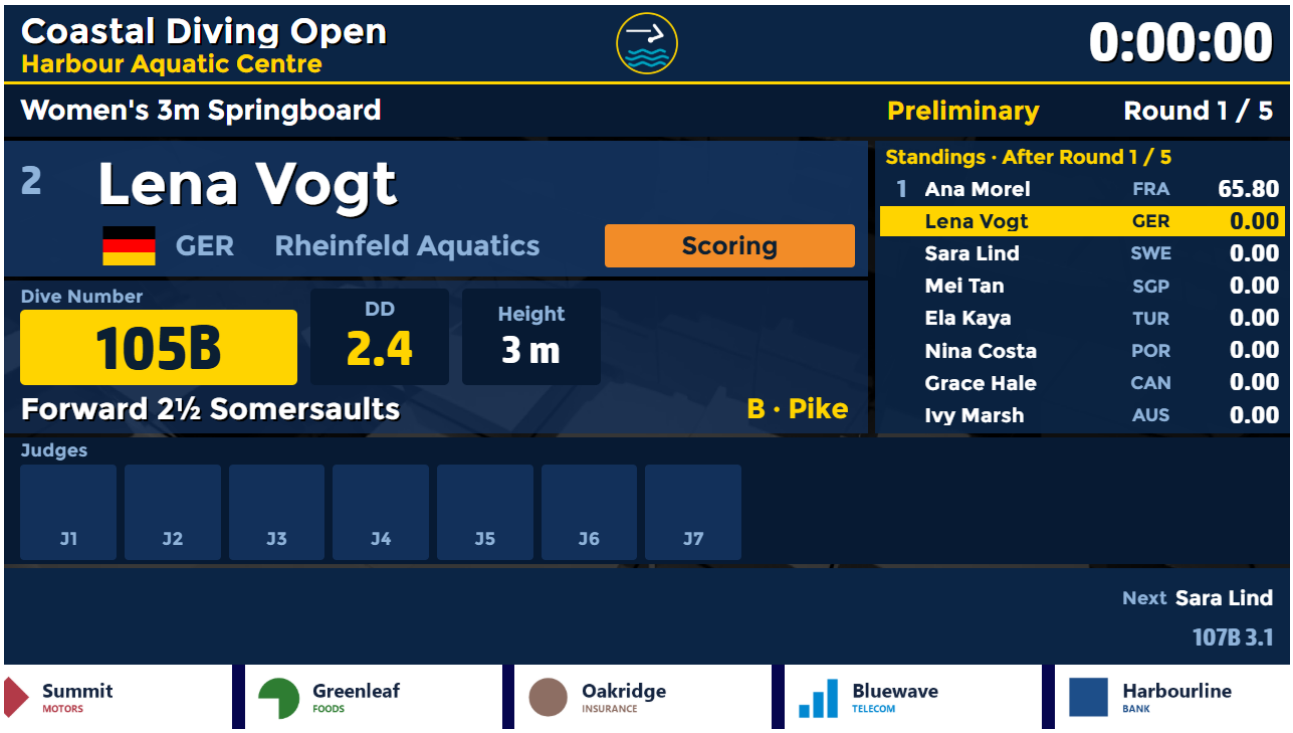



*Figure 14. The Sponsored board with the sample sponsors.*

The Sp page has three tabs:

- Sponsors: Apply puts the sponsor list on the band as a slide of images. The photo button opens the sponsor list (Info > Sponsors, chapter 13); the gear button opens the style values (image height, padding, speed, direction).
- Scrolling Text: four text slots (1-4). Type one item per line, then Apply: the band scrolls the lines in alternating colours. The gear button opens the text style (font, size, speed, direction); the three colour boxes set the background and the two line colours.
- Settings: Location (bottom or top) and Height of the band in pixels. Apply changes the board at once. The default is the bottom, 64 pixels.

## 7.5 Advertisement (Ad)

The Advertisement board has a scoreboard column, up to two banners and a large multimedia area for a video playlist, a camera, an NDI source or a screen capture. The factory layout: scoreboard column on the left (27 % of the width), banner 2 along the bottom (15 %), banner 1 off.

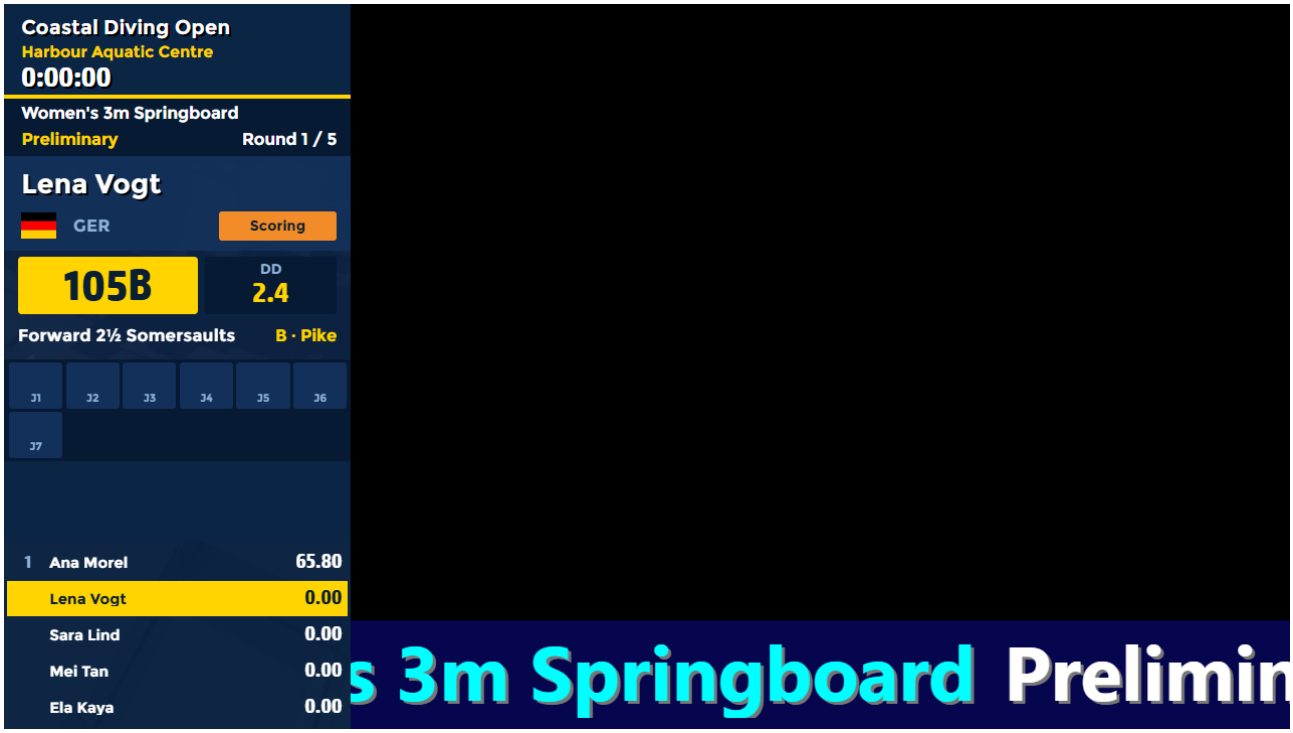



*Figure 15. The Advertisement board with the scoreboard column and a scrolling text in banner 2.*

The Ad page has five tabs:

| Tab | What It Does |
|---|---|
| Media Player | Six playlists of videos and pictures for the multimedia area: Add Clip, Delete Clip, Delete Playlist, Start / Finish (plays the list in a loop), Play / Stop in a row (one clip), sound on/off and the display mode (Stretch, Center, Original, ...). |
| Camera | A camera with its format, or an NDI source: Start shows it in the preview, Show puts it on the board, Stop ends it. |
| Screen Capture | Shows a part of the PC screen. Set Source Bounds with numbers or with Select Rectangle (drag a frame on the screen), then Start. |
| Banner | Content of banner 1 and banner 2: Sponsors (sliding images), Scrolling Text or Multimedia (a playlist). |

| Tab | What It Does |
|---|---|
| Settings | The layout: position (Top, Bottom, Left, Right) and size in percent of the scoreboard column, banner 1, banner 2, and the display mode of the multimedia area. Apply changes the board at once. |

While a source runs on the Ad page, the Ad tab in the menu bar blinks.

## 7.6 Chroma Key (CK)

The CK board shows a compact scorebug and lower-third graphics on a key colour. A vision mixer (or vMix, OBS ...) removes the key colour and lays the graphics over the camera picture.

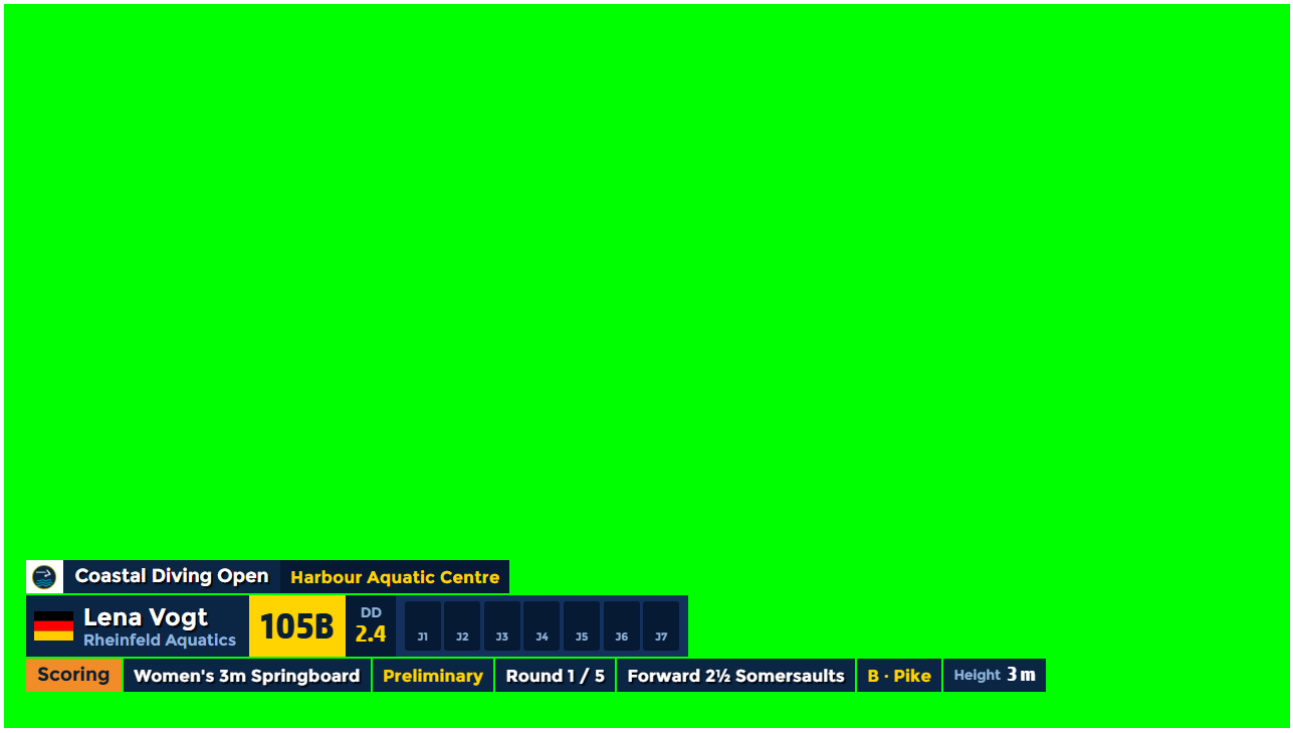



*Figure 16. The CK board with the scorebug on green.*

The CK page has five tabs:

- Info: Scoreboard shows the scorebug (fades in), Hide takes it off. The eleven info buttons open the editors of the info screens; their Show puts the lower third on the CK board (chapter 9). Hide Lower Third takes the lower third off.
- Media Player, Camera, Screen Capture: as on the Ad page; the picture fills the CK board behind the graphics instead of the key colour.
- Settings: Chroma Key Color: transparent, green (default), blue or magenta. The chosen colour has a red frame and is used at once.

> **Note:** For NDI output, use the green, blue or magenta key colour: the NDI stream carries no transparency.

## 7.7 Source on Mode Switch

Settings > Screen Properties > Source on mode switch:

- Manual (default): a source stopped by a display-mode change stays stopped. Start it again by hand.

- Restore: when you come back to Ad or CK, the source that ran when you left it (video, playlist, camera, NDI input or screen capture) starts again after a short pause. If it cannot start, a short notice tells you to start it by hand. Restore remembers the source only while the program runs.

## 7.8 NDI Output

The NDI button on the Game tab sends the board of the current display mode as an NDI video stream (60 frames per second) into the network. Receivers such as vMix or OBS list it under the sender name DV7_NDI. The button is green while it sends, amber when the stream stopped (click to restart) and grey when NDI is not available on this PC (rest the mouse on it for the reason). Chapter 13 describes NDI as an input.

## 7.9 Typical Set-Ups

LED wall or screen in the venue:

1. Connect the LED controller (or screen) as a second display of the PC and extend the Windows desktop to it.
2. In Settings > Screen Properties set L and T to the position of that display in the Windows layout, W and H to its resolution (for example 1920 × 1080, or the size the LED controller expects).
3. Use the Standard mode, the Sponsored mode for a sponsor band, or the Advertisement mode for video and live pictures during the competition.

TV production with a vision mixer:

1. Choose the CK display mode and a key colour (green by default) on the CK page > Settings.
2. Send the CK board to the mixer: as a video output of the PC (second display into a converter), or over the network with the NDI button.
3. Key the colour out in the mixer; the scorebug and the lower thirds lie over the camera picture.
4. Show the info screens as lower thirds from the Info tab or the CK page.

Streaming with a software mixer (OBS, vMix):

1. Click NDI on the Game tab. The board appears in the software as the NDI source DV7_NDI.
2. For an overlay use the CK mode and a chroma-key filter on the source in the software; for a full-screen graphic use the Standard mode.

In every set-up the operator can work on the main window on the PC, from a phone or tablet (chapter 14), or with the keyboard shortcuts (chapter 16).

# 8. Designs

## 8.1 The Three Masters

Every board type comes in three factory designs, the masters. They have the same layout and differ in colour:

- Master 1 - Navy (default): navy panels and a yellow accent.
- Master 2 - Charcoal: dark grey panels and an electric cyan accent.
- Master 3 - Clay: terracotta panels, a chalk-white accent and a gold highlight.

The Sponsored board uses the Standard design. Applying a Standard master also restyles its info screens, Banner and Announce. The Chroma Key masters bring their own set of lower thirds.

## 8.2 Choosing a Design

1. On the Game tab, choose the display mode (St, Sp, Ad or CK).
2. Click Select Design (the folder icon next to the mode buttons). The design gallery opens next to it.
3. Click a design in the list. The preview on the right shows it with the live competition.
4. Click Apply.

| Button | What It Does |
|---|---|
| Apply | Uses the selected design for this display mode and closes the gallery. |
| Delete | Deletes one of your own designs after the question "Delete the Design ...?". Masters cannot be deleted. |
| Rename (pencil icon) | Renames one of your own designs: type the new name in the list and press Enter. Masters cannot be renamed. |

Esc, the X or a click outside closes the gallery.

> **Note:** Applying a Standard master replaces the layouts of all info screens, Banner and Announce in use, without a question. If you changed an info screen in the design editor, save it as your own design first or note your changes.

## 8.3 Saving Your Own Design

The design editor (section 8.4) changes the design in use. To keep it as a design of its own:

1. In the design editor, click Save Design As (the disk icon in the title bar).
2. Type a name and confirm. The program reports "The data has been successfully saved."

Your design appears in the gallery of that display mode, next to the masters. Save Design As saves the scoreboard (Game) layout; for the Advertisement board it also keeps the layout of the scoreboard column and the banners. For the Chroma Key mode, saving is not yet supported: the program shows "Sorry, Design Saving Is Not Supported For CK Mode Yet!".

## 8.4 The Design Editor

Open Settings and click the design button of the current display mode: [St]andard Board Design, [Sp]onsored Board Design, [Ad]vertisement Board Design or [CK] Board Design. Only the button of the active mode is enabled.

| Control | What It Does |
|---|---|
| Screens | Game (the scoreboard), Banner, Announce and the 11 info screens. On CK: Game and the 11 lower thirds. |
| Elements | Every object of the selected screen. Hidden objects are grey. Click one to edit it. |
| Location | Shows the position and size values of the element (left, top, width, height ...). |
| Style | Shows the look values (colour, font, size, shadow ...). |
| Show or Hide | Switches the element between shown and hidden. |
| Insert Row | Adds an empty value row; type the property and the value. |
| Delete Row | Removes the selected value row. |
| Values | Property and value. Click a property for a list of names; colour values open a colour picker, font-family a font picker. |
| Factory Settings | Brings back the factory version of the selected screen after a question. |
| Save & Apply | Saves the changes of the selected element and redraws the board. |
| Save Design As | Saves the scoreboard as your own design (section 8.3). |

How to change an element:

1. Click the screen, then the element. The board shows the element with a red dotted frame.
2. Click Location or Style and change the values.
3. Click Save & Apply. Save each element before you choose the next one.

> **Note:** The editor works on the live output: info screens are put on the board while you edit them, and the selected element gets a red frame until you go back to the Game tab. Do not edit designs while you are on air.

## 8.5 Objects, Backgrounds and Units

- Every object of a board (name, flag, dive block, judge box, clock, logo ...) is an element with its own Location and Style. You can move, resize, recolour or hide each one.
- The background of the Standard, Sponsored and Advertisement boards has two layers: a background video (Background Video Opacity in Screen Properties sets its strength) and a middle image. Choose them with the two layer buttons at the top right of the Game tab. The board logo is chosen with the Logo slot.
- The Chroma Key board has no background: it is transparent over the key colour.

Units of the values:

| Unit | Meaning |
|---|---|
| u | The board unit: 1u = 1 % of the board height on a 16:9 or wider board; on narrower boards (4:3, 5:4) it follows the width. Use u for objects that must keep their shape on every board size, for example "23u". |
| px, %, em, vh, vw | Usual web units, kept as typed. |
| Number without a unit | For left, right, width and the horizontal margins: % of the board width (vw). For top, bottom, height, font size, line height and the vertical margins: % of the board height (vh). |

Fonts: the factory designs use Montserrat for words and HP Simplified for digits. Both are installed with the program, together with Agency, DS-Digital, Groteskia, Jersey M54, TRT and Axis. The font picker lists every font installed in Windows.

## 8.6 Factory Settings

To undo your changes of one screen, select it in the design editor and click Factory Settings. The program asks "Factory Settings Will Be Restored. Are You Sure?" and restores that screen. Use it for info screens, Banner and Announce in the Standard display mode. To restore the scoreboard itself, or in the Sponsored and Advertisement modes, apply the master again in the design gallery (section 8.2).

## 8.7 Designs After an Update

When a new version brings new factory designs, the program checks the designs in use at the first start:

- A design you never changed is replaced by the new factory design.
- A design you changed is kept. The log file names it ("customised design - kept"); the new factory design is in the gallery.
- The Standard board, the Advertisement board and the Chroma Key set are each replaced as a whole or not at all; the info screens are checked one by one.

Your own saved designs are never changed.

# 9. Info Screens

## 9.1 The Info Tab

The Info tab holds everything that is shown instead of, or on top of, the scoreboard.

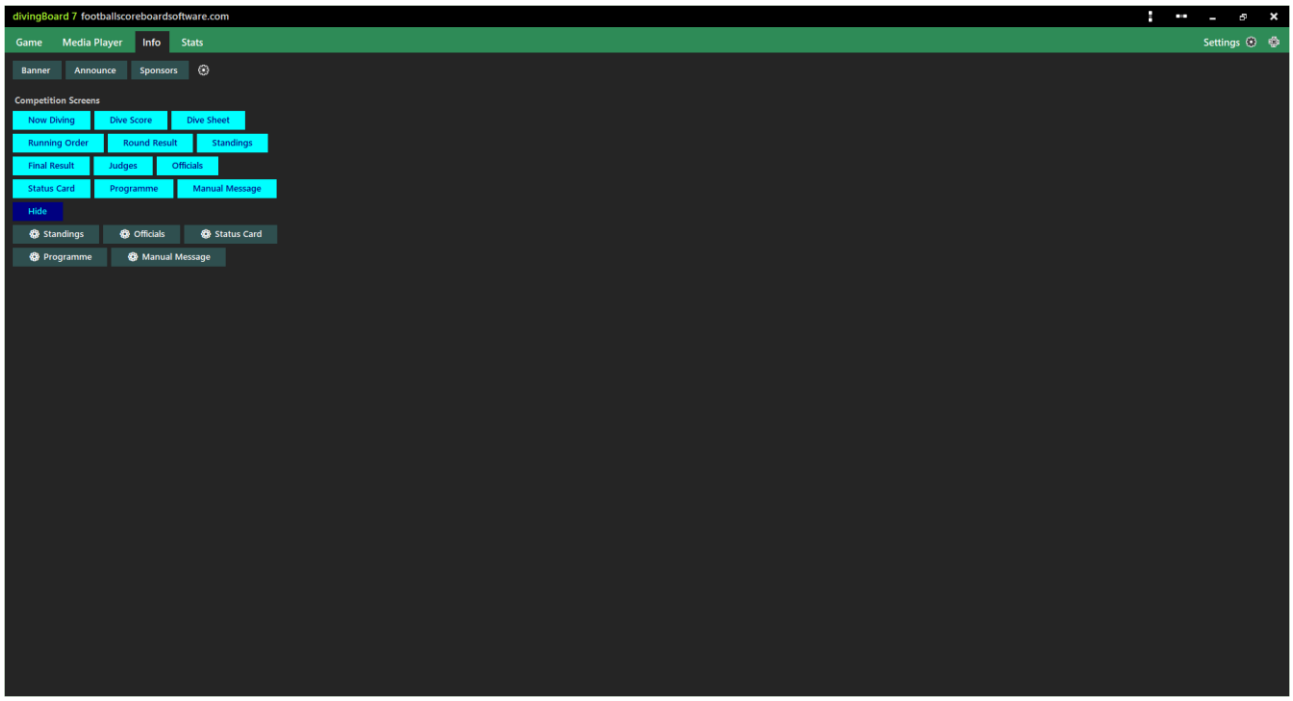



*Figure 17. The Info tab with the eleven competition screens.*

| Control | What It Does |
|---|---|
| Banner | A full-screen text banner (chapter 13). |
| Announce | A full-screen announcement (chapter 13). |
| Sponsors | The sponsor list (chapter 13). |
| Background (gear) | The background of the info screens on the St, Sp and Ad boards: the scoreboard's background video (default), black, or a selected video or picture. |
| Competition Screens | Eleven light buttons, one per info screen: a click shows the screen at once. The screen on the air has a lime frame. |
| Hide | Takes the screen off the air. |
| Gear buttons | Standings, Status Card, Programme and Officials have something to fill in: the gear button opens their editor. |

## 9.2 Showing and Hiding a Screen

Most screens have no fields: they show the competition as it stands.

1. To change what a screen shows, click its gear button and fill in the editor. Every change is saved at once; there is no Save button. The editor has Show and Hide too.

2. Click the screen's button on the Info tab (or on the Info tab of the CK page). In St, Sp and Ad the screen fills the board. In CK it appears as a lower third.
3. Click Hide to go back to the scoreboard (CK: the lower third fades out).

- Show uses on-air colours (light), Hide off-air colours (dark).
- The screen is built when you click Show. It is not refreshed while on air: click Show again after the data changed. Only the Status Card countdown runs by itself.
- Esc or the X closes the editor; the screen stays on air.
- The title and venue lines of the Game tab are the subtitle of every screen on the St board.
- From the remote control or the HTTP API: info_show with the screen name, info_hide (chapter 15).

## 9.3 The Screens at a Glance

| Button | Shows | Fields | API Name |
|---|---|---|---|
| Now Diving | The current diver, the dive, DD, rank and total | – | Diver |
| Dive Score | The points and awards of the current dive, once published | – | Score |
| Dive Sheet | The sheet of the current diver in this stage | – | Sheet |
| Running Order | The first 12 entries of the running order, with the dives of this round | – | StartList |
| Round Result | The top 10 published dives of this round | – | Round |
| Standings | The ranking of this stage | Rows | Standings |
| Final Result | The top 8 of the competition | – | Final |
| Judges | The referee and the named judges | – | Panel |
| Officials | A list of officials | Officials | Officials |
| Status Card | A notice with an optional countdown | Status, Custom Text, Countdown | Status |

| Button | Shows | Fields | API Name |
|---|---|---|---|
| Programme | The events of the day | Heading, Events | Order |

## 9.4 Now Diving

The team, the diver, the dive name and position, the dive number and height, the DD, and the rank and total once the diver has a published dive. The round and the stage are at the bottom.

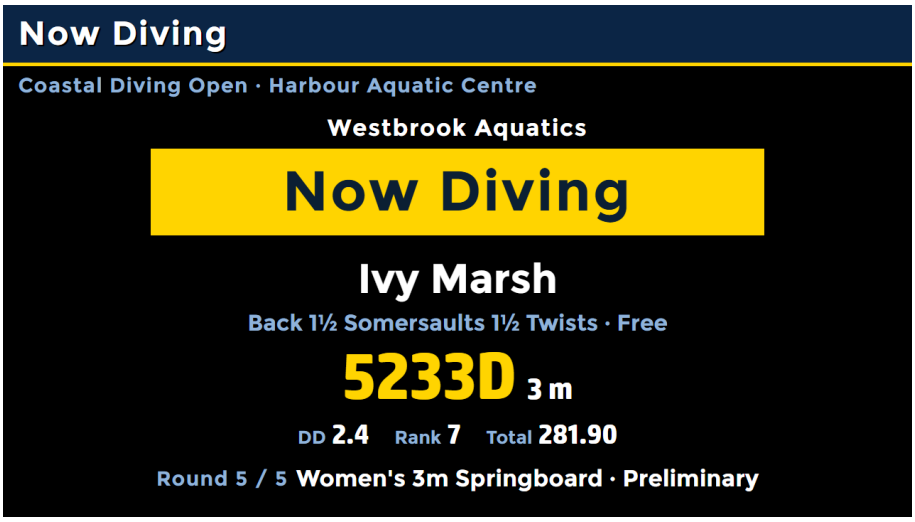



*Figure 18. Now Diving on the St board.*

## 9.5 Dive Score

The dive number and DD, the diver, the points and the awards with the penalties applied, then the total and the rank. A failed dive shows Failed Dive in place of the penalty text.

The screen needs a published dive: show it after Publish and before Next Diver. Before Publish it stays empty.

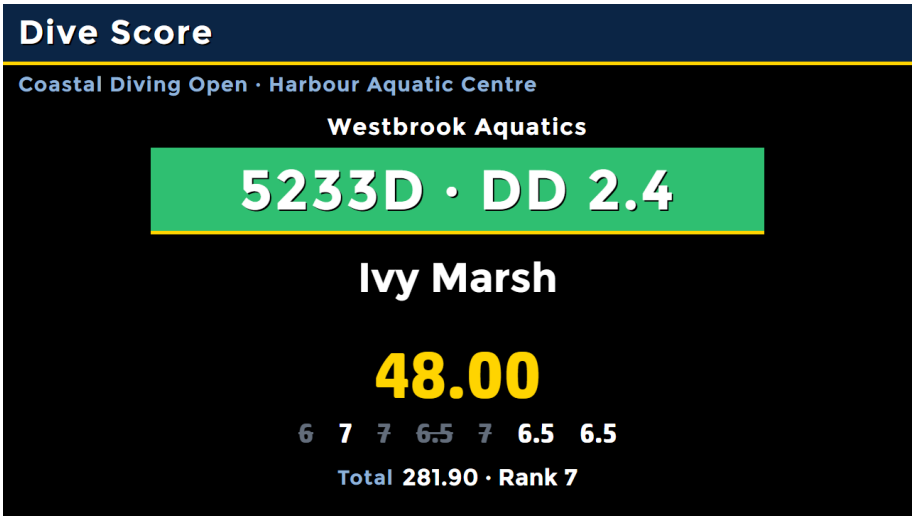



*Figure 19. Dive Score on the St board.*

## 9.6 Dive Sheet

All dives of the current diver in this stage, with the DD and the points. The dive of the current round is marked.

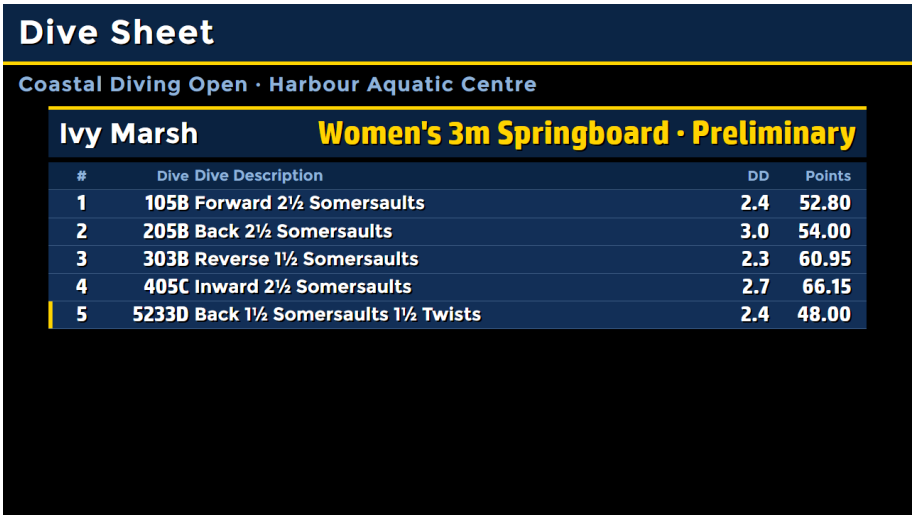



*Figure 20. Dive Sheet on the St board.*

## 9.7 Running Order

The order of this stage with the dive of this round. It shows the first 12 entries. The current diver is marked.




*Figure 21. Running Order on the St board.*

## 9.8 Round Result

The dives published so far in this round, best first, with the round rank, the dive, the DD and the points. It shows up to 10 dives.

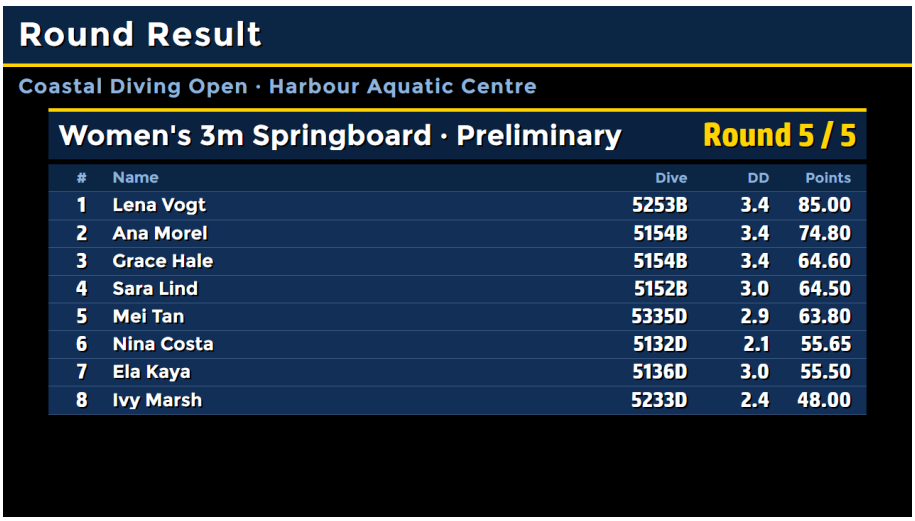



*Figure 22. Round Result on the St board.*

## 9.9 Standings

The ranking of this stage, with the total and the points behind the leader. The headline names the round.

- Rows: how many entries to show, default 10.




*Figure 23. Standings on the St board (left) and as a CK lower third (right).*

## 9.10 Final Result

The top 8 of the competition with their totals, the first three highlighted. Divers who did not reach the last stage are ranked behind those who did, by the last stage they reached.

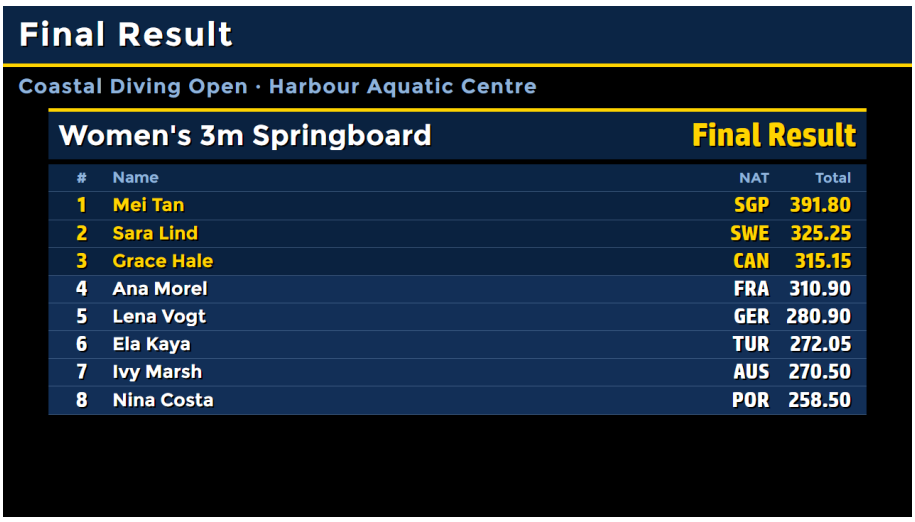



*Figure 24. Final Result on the St board.*

## 9.11 Judges

The referee and the judges with their seats and country codes, from the Judges window (chapter 12). A seat without a name is left out.

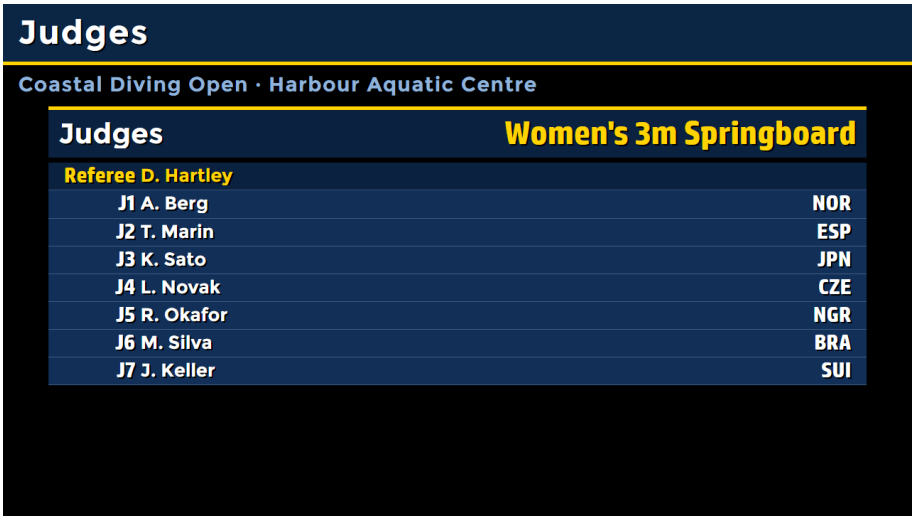



*Figure 25. Judges on the St board.*

## 9.12 Officials

A list with Role, Name and Country (a country code shows a flag). In the list, the empty last row adds an entry; select a row and press Delete to remove it. The sample competition has a referee, an assistant referee and a secretary.




*Figure 26. Officials on the St board.*

## 9.13 Status Card

A notice for an interruption, with an optional countdown.

- Status: Warm-Up, Break, Protest, Equipment Check, Delay, Medal Ceremony, Custom.
- Custom Text: the text for Custom.
- Countdown (Minutes, 0 = None): the card counts down from this time.

The countdown starts when you click Show; each Show starts it again from the full time. At 0:00 the card stays on screen until you click Hide.

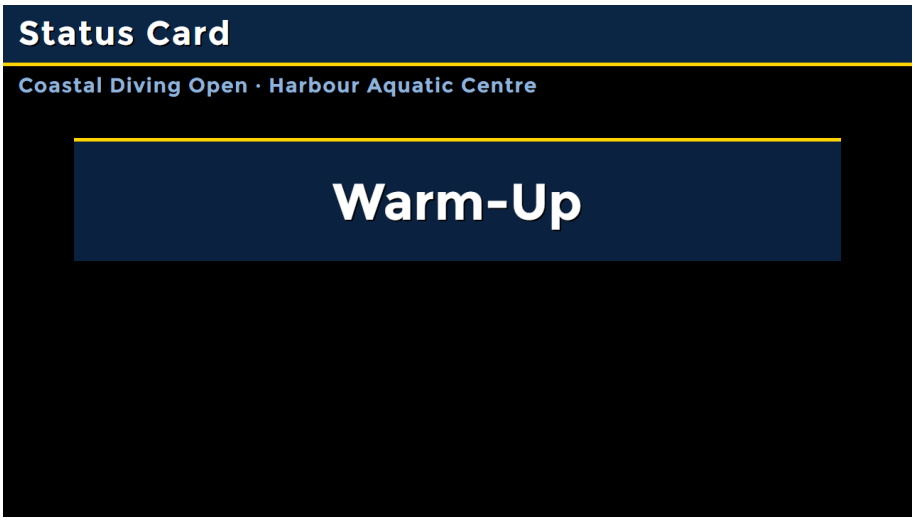



*Figure 27. A Status Card with Warm-Up.*

## 9.14 Manual Message

Any text of your own on the board: a heading, a main line, a second line, a big value with its unit, and a small line. Type it in the Manual Entry window (section 5.18) or behind the gear button of this screen. It uses the design of the Dive Score screen.

## 9.15 Programme

The events of the day: a list with Time, Event, Round and Height.

- Heading: replaces the subtitle on the St board, for example "Saturday".

In the list, the empty last row adds an entry; select a row and press Delete to remove it.

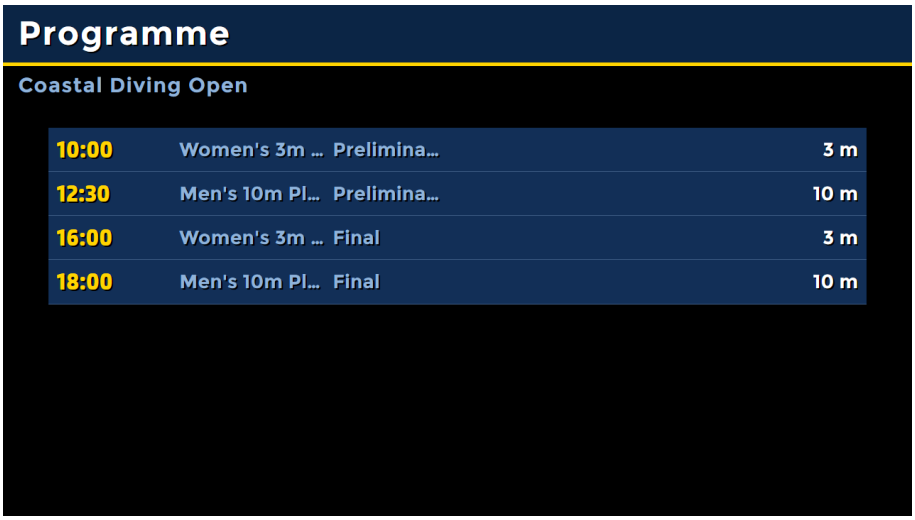



*Figure 28. The Programme on the St board.*

## 9.16 CK Lower Thirds

In the Chroma Key display mode every info screen appears as a lower third above the scorebug. The editors and the data are the same.

- The CK page (fifth tab CK > Info) has the same eleven buttons, Scoreboard and Hide for the scorebug, and Hide Lower Third.
- Show in an editor puts the lower third on; Hide or Hide Lower Third fades it out.
- The lower thirds have no subtitle line.

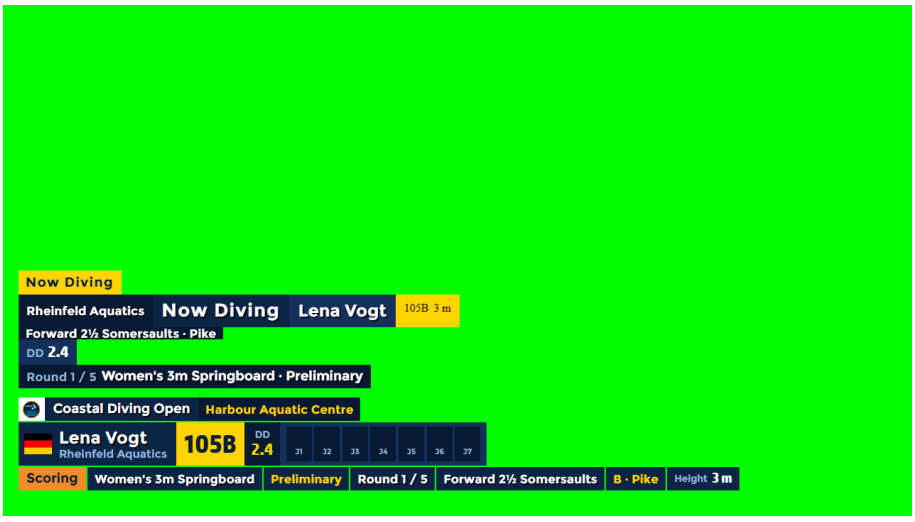



*Figure 29. Now Diving as a CK lower third above the scorebug.*

# 10. Entries and Dive Sheets

## 10.1 The Entries and Dive Sheets Window

Click Entries and Dive Sheets in the tools on the Game tab. The upper table holds the entries, the lower table the dive sheet of the selected entry. Every change is saved at once with the competition.

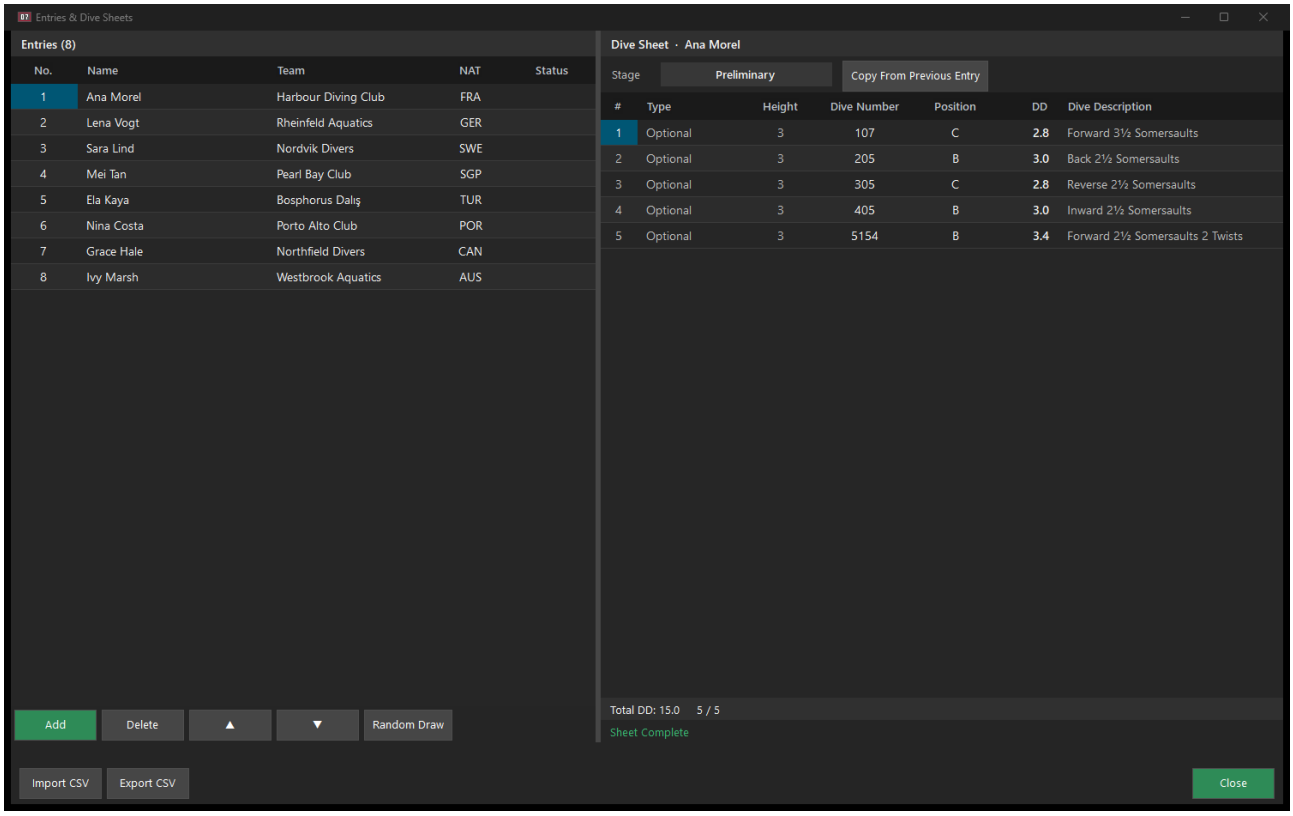



*Figure 30. Entries and Dive Sheets, with the sheet of the first diver.*

## 10.2 Entries

| Column | What It Holds |
|---|---|
| No. | The start number. The first stage runs in this order. |
| Name | The diver, or the first diver of a pair. |
| Partner | The second diver. Only in synchronised events. |
| Team | The club, the school or the federation. |
| NAT | The country code. It selects the flag (section 10.7). |
| Grade | The school year, printed on the NFHS score sheet. |
| Status | Empty for a diver who competes. DNS = did not start, WD = withdrawn, DSQ = disqualified. These entries take no rank and are skipped. Before a stage starts, the next ranked diver comes in when the stage would fall short (article 4.1.12). Set it back to empty to bring the entry back. |

The buttons:

| Button | What It Does |
|---|---|
| Add | Adds an entry named New Diver, ready for typing. |
| Delete | Deletes the entry and its sheet after a question. An entry with published scores cannot be deleted: "This Entry Has Scores: Use WD Instead". |
| ▲ ▼ | Move the entry up or down in the start order. |
| Random Draw | Draws a new running order after a question. Not possible once a dive is published ("The Competition Has Started"). |
| Import CSV, Export CSV | See section 10.6. |
| Close | Saves and closes. |

An entry with a Status stays in the running order in grey, with the mark in the first column. Next Diver skips it, and it does not stop the stage from finishing.

## 10.3 The Dive Sheet

Select an entry in the upper table. The lower table shows one row per round of the selected stage. Use the Stage list above the sheet to see another stage.

| Column | What It Does |
|---|---|
| Round | The round of the event. |
| Type | Voluntary, Optional or Assigned; in a team event also F, M or S. |
| Height | The height of the round. |
| Dive Number | Type the number, with or without the position letter: 107C or 107. |
| Position | A, B, C or D. It is filled in when the letter was typed or when the dive has only one position. Otherwise the program asks "Choose the Position". |
| DD | Comes from the Dive Table. In an Assigned round it is the Assigned DD of the event. Type a value to replace it for this dive. |
| Dive Description | Built from the number. |
| Diver | Only in team events: who dives in this round. |

- A dive number is checked as you type it. "This dive is not in the table for this height and position" means the combination is not in the Dive Table (chapter 6.10).
- Empty the Dive Number to remove the dive from the sheet.
- A row with a published dive is read only.

## 10.4 Sheet Warnings

The line under the sheet shows what does not fit the event type. These are warnings only: nothing stops the operator, because the referee decides.

| Warning | Meaning |
|---|---|
| Missing dives: 2 | The sheet is not complete. |
| Dive repeated: 105 | The same dive number appears twice, and the event does not allow it. |
| Dives must come from 5 different groups | The list uses too few groups. |
| Limited dives total 9.6 exceeds 9.5 | The Limited rounds are above the Voluntary DD Limit. |

## 10.5 Synchronised and Team Entries

- Synchronised: one entry per pair, with both names in Name and Partner. The board and the reports show "Name / Partner".
- Team: one entry per team. The dive sheet shows the Diver column, and the name typed there appears on the board for that round.

## 10.6 The CSV Format

Import CSV adds the entries of a text file to the list; it does not replace the list. The file is UTF-8 text with one entry per line:

```
Name;Partner;Team;NAT;Grade;Dive 1;Dive 2;Dive 3;Dive 4;Dive 5
Ivy Marsh;;Westbrook Aquatics;AUS;;105B;205B;303B;405C;5233D
Ana Morel;Lena Vogt;Harbour Diving Club;FRA;;107C;205B;303B;405C;5233D
```

The second data line is a synchronised pair.

- The separator is a semicolon. A line without a semicolon is split at the commas.
- The first five fields can be empty, but the semicolons must stay. Name is required.
- A line whose first field is Name is a heading and is skipped. Empty lines are skipped.
- Every dive needs its position letter, for example 107C.
- The dives go to the rounds in order. An event with Keep Total stages spreads them over its stages; any other event uses the first stage.
- A dive that is not in the table for that height and position is left out.

After the import the bottom line shows "8 Entries Imported" and the first three problems, if any. Check the sheets after an import.

Export CSV writes the same format with the file name entries.csv: the entries in start order with the dives of the first stage and of Keep Total stages.

## 10.7 Flags and Country Codes

The boards show a flag for every country code: in NAT on the entries, in the NAT column of the judges and in the Country column of Officials.

- Type the code of the country as used in sport (IOC, for example GER, SUI, NED, GBR) or the two-letter ISO code (de, ch).
- The flags are vector images (SVG) in common\images\flags\country, 271 flags, including England (gb-eng), Scotland (gb-sct), Wales (gb-wls) and Northern Ireland (gb-nir).
- The three-letter codes are translated to the flag files with common\images\flags\country\codes.csv, one line per code: GER,de. Lines starting with # are comments.

- An unknown code shows no flag; the code itself is still shown where the design has a code field.

To add a code, open codes.csv in a text editor, add a line (for example ENG,gb-eng), save it and restart the program.

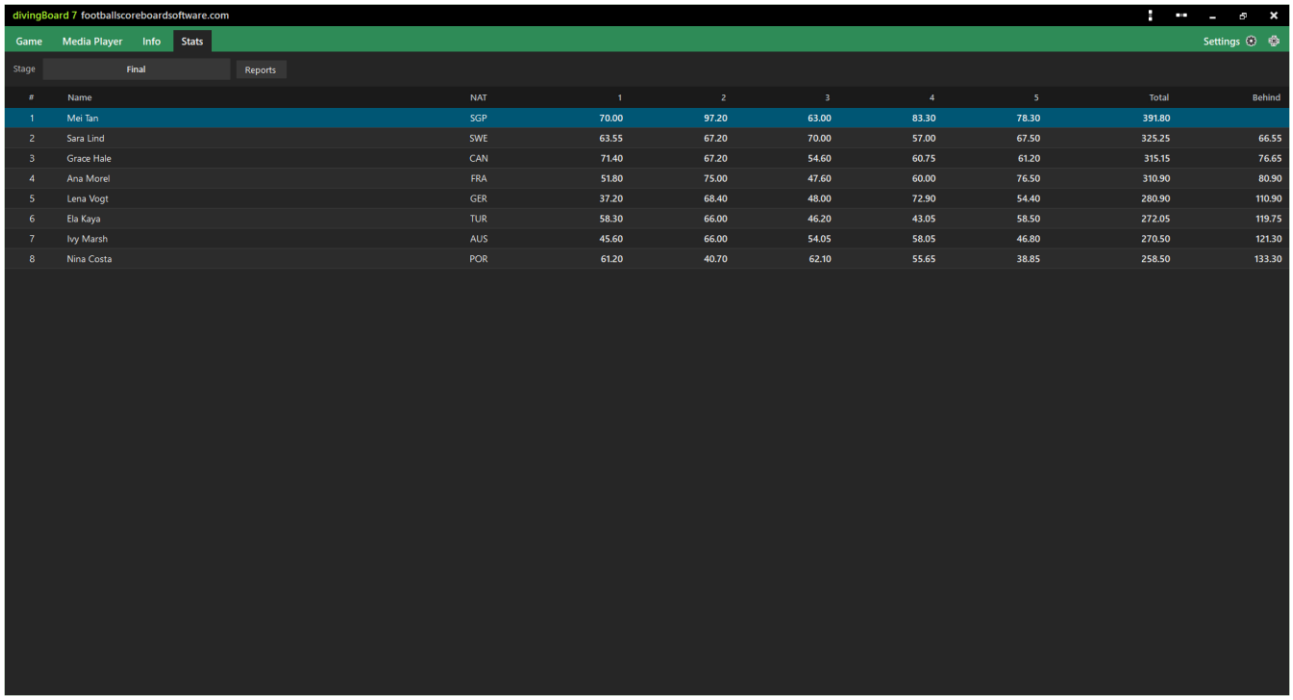
## 10.8 Fast Entry

- The window shows the entries on the left and the dive sheet of the selected entry on the right. Drag the bar between them to change the widths.
- Click a Dive Number cell and type the dive with its position, such as 5253B. The box suggests the dives of the round's height. Enter stores the dive and goes on to the next round.
- The position can stay out of the number when the dive has only one position at that height; otherwise choose it in the Position column.
- Copy From Previous Entry fills the sheet with the dives of the entry above it in the start order: useful for team and pair entries.
- The line under the sheet shows the total DD, the voluntary total against its limit and how many dives are in. The next line shows the warnings, or Sheet Complete in green.

# 11. Results and Reports

## 11.1 The Stats Tab

The Stats tab shows the results of a stage round by round: rank, name, NAT, the points of every round, the total and the points behind the leader. It follows the competition by itself.



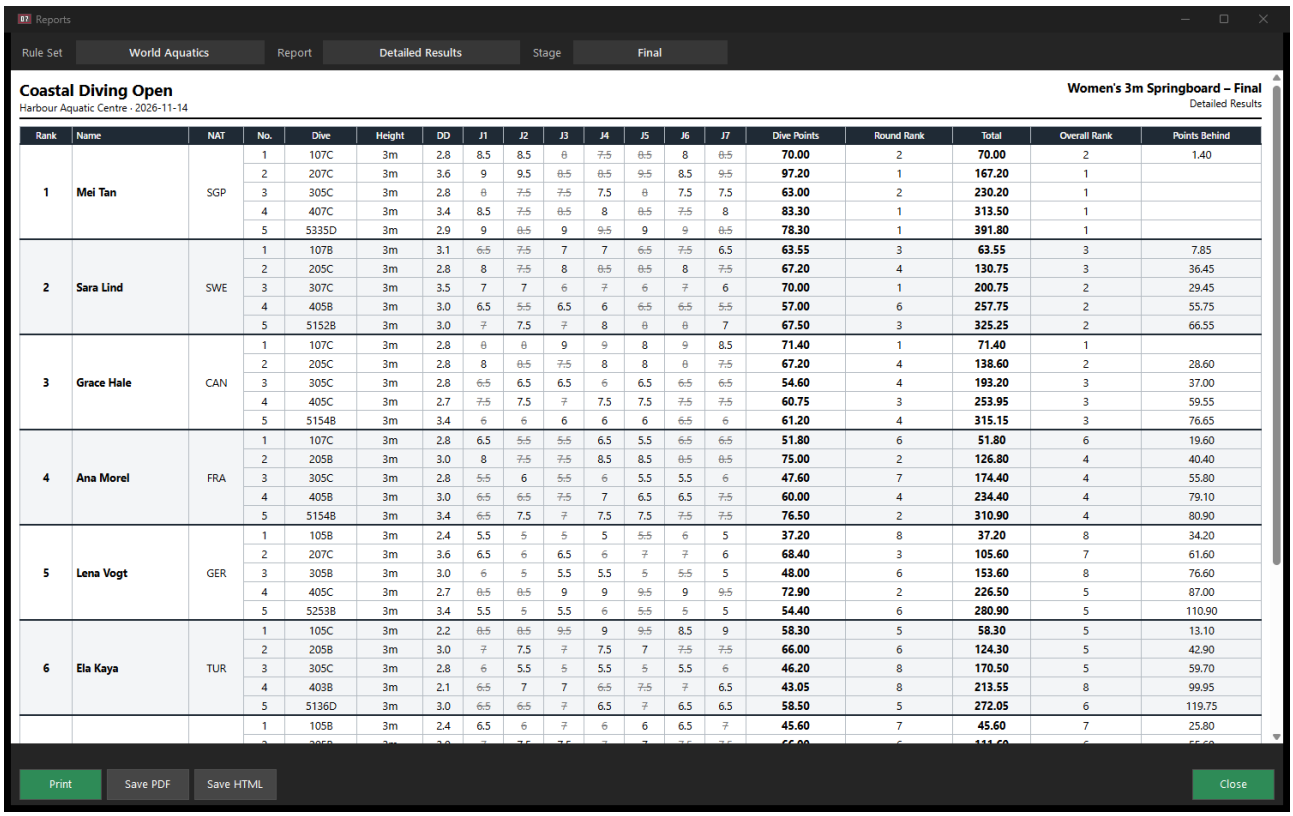

| # | Name | NAT | 1 | 2 | 3 | 4 | 5 | Total | Behind |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Mei Tan | SGP | 70.00 | 97.20 | 63.00 | 83.30 | 78.30 | 391.80 | |
| 2 | Sara Lind | SWE | 63.55 | 67.20 | 70.00 | 57.00 | 67.50 | 325.25 | 66.55 |
| 3 | Grace Hale | CAN | 71.40 | 67.20 | 54.60 | 60.75 | 61.20 | 315.15 | 76.65 |
| 4 | Ana Morel | FRA | 51.80 | 75.00 | 47.60 | 60.00 | 76.50 | 310.90 | 80.90 |
| 5 | Lena Vogt | GER | 37.20 | 68.40 | 48.00 | 72.90 | 54.40 | 280.90 | 110.90 |
| 6 | Ela Kaya | TUR | 58.30 | 66.00 | 46.20 | 43.05 | 58.50 | 272.05 | 119.75 |
| 7 | Ivy Marsh | AUS | 45.60 | 66.00 | 54.05 | 58.05 | 46.80 | 270.50 | 121.30 |
| 8 | Nina Costa | POR | 61.20 | 40.70 | 62.10 | 55.65 | 38.85 | 258.50 | 133.30 |

*Figure 31. The Stats tab: the result table of a stage.*

- Stage: choose the stage to show.
- Reports: opens the Reports window.
- The table is read only. Corrections go through Correct on the Game tab (chapter 5.6).

## 11.2 The Reports Window

Click Reports in the tools on the Game tab, or on the Stats tab. The window shows the selected report as a page.




| Rank | Name | NAT | No. | Dive | Height | DD | J1 | J2 | J3 | J4 | J5 | J6 | J7 | Dive Points | Round Rank | Total | Overall Rank | Points Behind |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Mei Tan | SGP | 1 | 107C | 3m | 2.8 | 8.5 | 8.5 | 8 | 7.5 | 8.5 | 8 | 8.5 | 70.00 | 2 | 70.00 | 2 | 1.40 |
| | | | 2 | 207C | 3m | 3.6 | 9 | 9.5 | 8.5 | 8.5 | 9.5 | 8.5 | 9.5 | 97.20 | 1 | 167.20 | 1 | |
| | | | 3 | 305C | 3m | 2.8 | 8 | 7.5 | 7.5 | 7.5 | 8 | 7.5 | 7.5 | 63.00 | 2 | 230.20 | 1 | |
| | | | 4 | 407C | 3m | 3.4 | 8.5 | 7.5 | 8.5 | 8 | 8.5 | 7.5 | 8 | 83.30 | 1 | 313.50 | 1 | |
| | | | 5 | 5335D | 3m | 2.9 | 9 | 8.5 | 9 | 9.5 | 9 | 9 | 8.5 | 78.30 | 1 | 391.80 | 1 | |
| 2 | Sara Lind | SWE | 1 | 107B | 3m | 3.1 | 6.5 | 7.5 | 7 | 7 | 6.5 | 7.5 | 6.5 | 63.55 | 3 | 63.55 | 3 | 7.85 |
| | | | 2 | 205C | 3m | 2.8 | 8 | 7.5 | 8 | 8.5 | 8.5 | 8 | 7.5 | 67.20 | 4 | 130.75 | 3 | 36.45 |
| | | | 3 | 307C | 3m | 3.5 | 7 | 7 | 6 | 7 | 6 | 7 | 6 | 70.00 | 1 | 200.75 | 2 | 29.45 |
| | | | 4 | 405B | 3m | 3.0 | 6.5 | 5.5 | 6.5 | 6 | 6.5 | 6.5 | 5.5 | 57.00 | 6 | 257.75 | 2 | 55.75 |
| | | | 5 | 5152B | 3m | 3.0 | 7 | 7.5 | 7 | 8 | 8 | 8 | 7 | 67.50 | 3 | 325.25 | 2 | 66.55 |
| 3 | Grace Hale | CAN | 1 | 107C | 3m | 2.8 | 8 | 8 | 9 | 9 | 8 | 9 | 8.5 | 71.40 | 1 | 71.40 | 1 | |
| | | | 2 | 205C | 3m | 2.8 | 8 | 8.5 | 7.5 | 8 | 8 | 8 | 7.5 | 67.20 | 4 | 138.60 | 2 | 28.60 |
| | | | 3 | 305C | 3m | 2.8 | 6.5 | 6.5 | 6.5 | 6 | 6.5 | 6.5 | 6.5 | 54.60 | 4 | 193.20 | 3 | 37.00 |
| | | | 4 | 405C | 3m | 2.7 | 7.5 | 7.5 | 7 | 7.5 | 7.5 | 7.5 | 7.5 | 60.75 | 3 | 253.95 | 3 | 59.55 |
| | | | 5 | 5154B | 3m | 3.4 | 6 | 6 | 6 | 6 | 6 | 6.5 | 6 | 61.20 | 4 | 315.15 | 3 | 76.65 |
| 4 | Ana Morel | FRA | 1 | 107C | 3m | 2.8 | 6.5 | 5.5 | 5.5 | 6.5 | 5.5 | 6.5 | 6.5 | 51.80 | 6 | 51.80 | 6 | 19.60 |
| | | | 2 | 205B | 3m | 3.0 | 8 | 7.5 | 7.5 | 8.5 | 8.5 | 8.5 | 8.5 | 75.00 | 2 | 126.80 | 4 | 40.40 |
| | | | 3 | 305C | 3m | 2.8 | 5.5 | 6 | 5.5 | 6 | 5.5 | 5.5 | 6 | 47.60 | 7 | 174.40 | 4 | 55.80 |
| | | | 4 | 405B | 3m | 3.0 | 6.5 | 6.5 | 7.5 | 7 | 6.5 | 6.5 | 7.5 | 60.00 | 4 | 234.40 | 4 | 79.10 |
| | | | 5 | 5154B | 3m | 3.4 | 6.5 | 7.5 | 7 | 7.5 | 7.5 | 7.5 | 7.5 | 76.50 | 2 | 310.90 | 4 | 80.90 |
| 5 | Lena Vogt | GER | 1 | 105B | 3m | 2.4 | 5.5 | 5 | 5 | 5 | 5.5 | 6 | 5 | 37.20 | 8 | 37.20 | 8 | 34.20 |
| | | | 2 | 207C | 3m | 3.6 | 6.5 | 6 | 6.5 | 6 | 7 | 7 | 6 | 68.40 | 3 | 105.60 | 7 | 61.60 |
| | | | 3 | 305B | 3m | 3.0 | 6 | 5 | 5.5 | 5.5 | 5 | 5.5 | 5 | 48.00 | 6 | 153.60 | 8 | 76.60 |
| | | | 4 | 405C | 3m | 2.7 | 8.5 | 8.5 | 9 | 9 | 9.5 | 9 | 9.5 | 72.90 | 2 | 226.50 | 5 | 87.00 |
| | | | 5 | 5253B | 3m | 3.4 | 5.5 | 5 | 5.5 | 6 | 5.5 | 5 | 5 | 54.40 | 6 | 280.90 | 5 | 110.90 |
| 6 | Ela Kaya | TUR | 1 | 105C | 3m | 2.2 | 8.5 | 8.5 | 9.5 | 9 | 9.5 | 8.5 | 9 | 58.30 | 5 | 58.30 | 5 | 13.10 |
| | | | 2 | 205B | 3m | 3.0 | 7 | 7.5 | 7 | 7.5 | 7 | 7.5 | 7.5 | 66.00 | 6 | 124.30 | 5 | 42.90 |
| | | | 3 | 305C | 3m | 2.8 | 6 | 5.5 | 5 | 5.5 | 5 | 5.5 | 6 | 46.20 | 8 | 170.50 | 5 | 59.70 |
| | | | 4 | 403B | 3m | 2.1 | 6.5 | 7 | 7 | 6.5 | 7.5 | 7 | 6.5 | 43.05 | 8 | 213.55 | 8 | 99.95 |
| | | | 5 | 5136D | 3m | 3.0 | 6.5 | 6.5 | 7 | 6.5 | 7 | 6.5 | 6.5 | 58.50 | 5 | 272.05 | 6 | 119.75 |
| | | | 1 | 105B | 3m | 2.4 | 6.5 | 6 | 7 | 6 | 6 | 6.5 | 7 | 45.60 | 7 | 45.60 | 7 | 25.80 |

*Figure 32. The Reports window with the Detailed Results of a stage.*

| Control | What It Does |
|---|---|
| Rule Set | World Aquatics, US High School (NFHS) or US College (NCAA). It starts with the rule set of the event; a Custom event starts with World Aquatics. |
| Report | The reports of that rule set. |
| Stage | The stage of a stage report. |
| Print | Opens the print dialog. |
| Save PDF | Saves the page as a PDF file, named after the event. |
| Save HTML | Saves the page as an HTML file. |
| Close | Closes the window. |

| Rule Set | Reports |
|---|---|
| World Aquatics | Detailed Results, Results, Start List |
| US High School (NFHS) | Official Diving Score Sheet, Meet Results, Start List |
| US College (NCAA) | Meet Results, Start List |

Every report is built from the current state of the competition, so it can also be printed during the competition. The pages are laid out for A4.

> **Note:** The formats follow the published World Aquatics results and the NFHS score sheet. If your meet needs another form, check the report before the event (chapter 6.6).

## 11.3 World Aquatics Reports

Detailed Results (A4 landscape): one block per entry in ranking order, for the selected stage. Each dive has a row with the round, the dive, the height, the DD, the awards of every judge, the dive points, the round rank, the running total, the overall rank and the points behind the leader. Cancelled awards are crossed out and penalties are written under the points. The judges are listed at the end, and the referee in the footer.

Results (A4 landscape): one row per entry with rank, name, NAT, the points of every round, the total and the points behind.

An entry that left shows DNS, WD or DSQ instead of a rank. Points typed by hand are marked By Hand. The awards of repeated dives are listed under Awards Set Aside, for an appeal. An event ended early says so under the table.

## 11.4 NFHS Reports

Official Diving Score Sheet (A4 portrait): one sheet per diver, for the whole competition.

- At the top: Order of Finish, Name, Grade, School, Meet, Site and Date.
- One row per dive, grouped by stage: the order with Voluntary or Optional, the dive number and description, the position, the judges' awards, Judges' Total, Deg. of Diff. and Points Awarded.
- At the bottom: Total D.D. Voluntary Dives, Total D.D. Optional Dives and Total Points Awarded.
- Lines for the signatures of the diver, the coach and the referee.

The School comes from Team on the entries, the Grade from Grade, the Meet from the competition title and the Site from the venue.

Meet Results: see section 11.5, with NFHS in the footer.

## 11.5 Meet Results (NFHS and NCAA)

Meet Results (A4 portrait) covers the whole competition:

- The result list: Place, Diver, Team, Score and Diff (the distance to the winner).
- Team Scores, when the event has Team Points per Place.
- Dive Detail: a table per diver with every dive, the DD, the awards, Net Total and Score.

Team scores add up the points per place of the event type (chapter 6.3). Entries without a Team are not counted. Divers who share a place each get the points of that place.

> **Note:** Tie rules and scoring limits for team points differ between meets. Check the team scores by hand against your meet rules before you publish them.

## 11.6 Start List

The Start List (A4 landscape) shows the running order of the selected stage: order, name, NAT, the dive and DD of every round, and the total DD.

## 11.7 Printing a Report

1. Open Reports and choose the Rule Set, the Report and the Stage.
2. Check the page on the screen.

3. Click Print and choose the printer, or click Save PDF or Save HTML and choose the file.

The window shows Saved after the file is written, or Could Not Be Saved.

To have the names on the reports, fill in the judges and the referee in the Judges window (chapter 12) and the title, the venue, the date and the referee in New Competition (chapter 6).

# 12. Judges

## 12.1 Two Ways to Judge

The awards reach the desk in one of two ways, and you can mix them:

- Phones: each judge opens the judge page on a phone and sends the award. No app is needed.
- The desk: the judges show their awards and the operator types them into the tiles (chapter 5.3).

A panel has 3, 5, 7, 9 or 11 judges; synchronised events have 9 or 11. The event type sets the number.

## 12.2 The Judges Window

Click Judges in the tools on the Game tab.

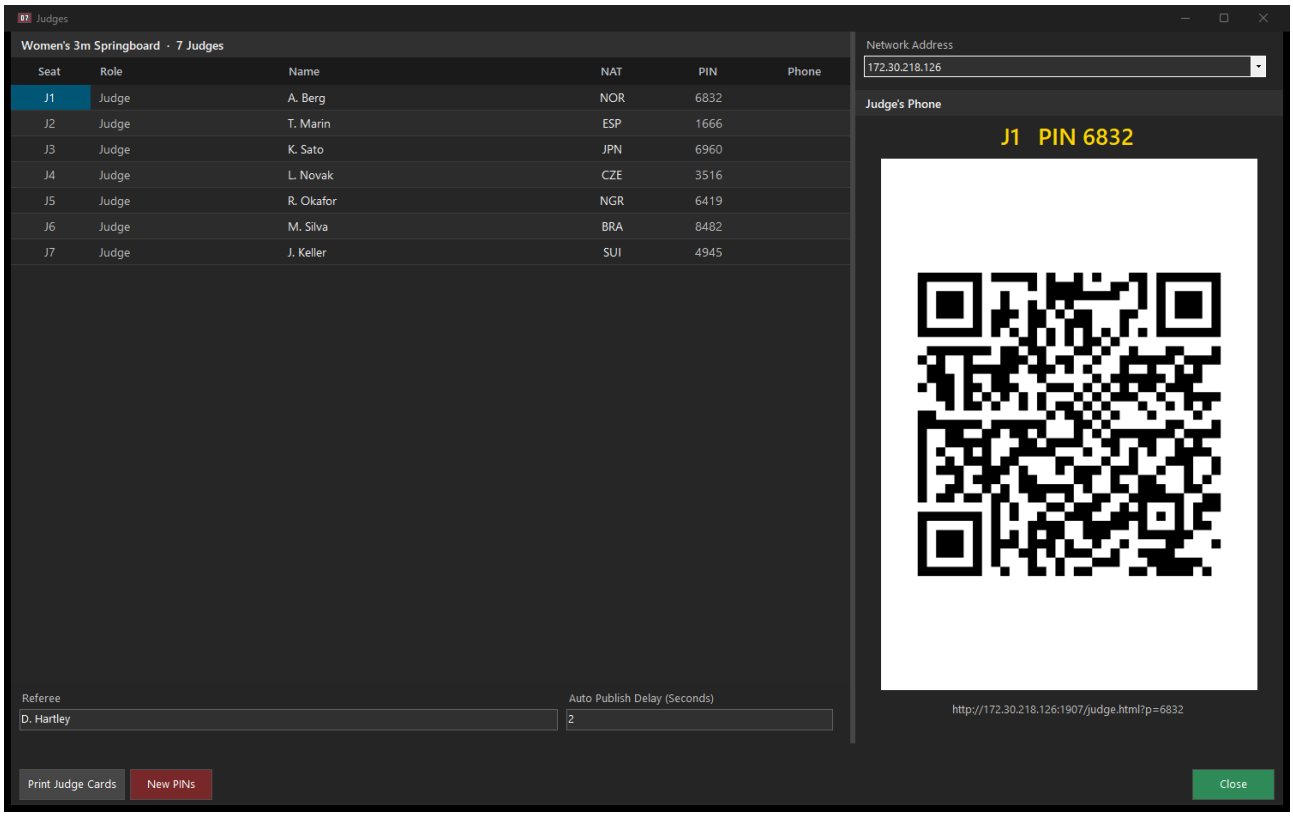



*Figure 33. The Judges window with the seat PINs and the QR code of the selected seat.*

| Control | What It Does |
|---|---|
| Seat | J1, J2 ...; in a synchronised event E1 ... and S1 .... |
| Role | Judge, Execution Diver 1, Execution Diver 2 or Synchronisation. |
| Name | The name of the judge, for the Judges screen, the reports and the phone. |
| NAT | The country code of the judge. |
| PIN | The PIN of this seat. |
| Phone | A green dot while the phone of this seat is connected (section 12.7). |
| Network Address | The address of this PC for the QR codes. Choose the one in the network of the phones. |
| QR code and address | The code and the address of the seat selected in the table. |

| Control | What It Does |
|---|---|
| Referee | The name of the referee. |
| Auto Publish Delay (Seconds) | 0 to 30, default 2 (chapter 5.9). |
| Close | Saves the names, the referee and the delay, and closes. |
| New PINs | Makes new PINs for every seat after a question. Every phone must log in again. |
| Print Judge Cards | Opens the judge cards (section 12.5). |

A yellow line under the address warns when the remote control is off. Then the phones cannot connect: switch it on in Settings > Remote Control (chapter 14.2).

## 12.3 Seats and Roles

Each seat has its own random four-digit PIN and its own QR code. A PIN is the seat: a phone logged in with it can give the award of that seat and no other. The PINs stay the same until you click New PINs, so a set of printed cards can be used again.

A PIN of a seat beyond the panel of the running event does not work. With a 5-judge event the PINs of J6 and up are refused.

| Panel | Seats |
|---|---|
| Individual, team | J1 up to the size of the panel: J3, J5, J7, J9 or J11 |
| Synchronised, 9 judges | E1, E2 execution diver 1; E3, E4 execution diver 2; S1 to S5 synchronisation |
| Synchronised, 11 judges | E1 to E3 execution diver 1; E4 to E6 execution diver 2; S1 to S5 synchronisation |

## 12.4 Connecting the Phones

1. Switch the remote control on (chapter 14.2). The phones and the PC must be in the same network.
2. Open Judges and choose the Network Address.
3. Select a seat in the table. The QR code changes to that seat.
4. Let the judge scan the code with the phone camera. The judge page opens on that seat, with no PIN to type.
5. Repeat for every seat. The Phone column shows a green dot for each connected phone.

Without the QR code: open http://<PC address>:1907/judge.html in the phone browser, type the seat PIN and tap OK.

## 12.5 Judge Cards

Print Judge Cards makes one card per seat for the panel of the running event: the seat, the name, the QR code, the PIN and the address. The cards open in the report viewer with Print, Save PDF and Save HTML (chapter 11.7).

> **Note:** The cards hold the address chosen in Network Address. If the PC gets another address, print them again. Hand each card only to the judge of that seat.

## 12.6 The Phone Page

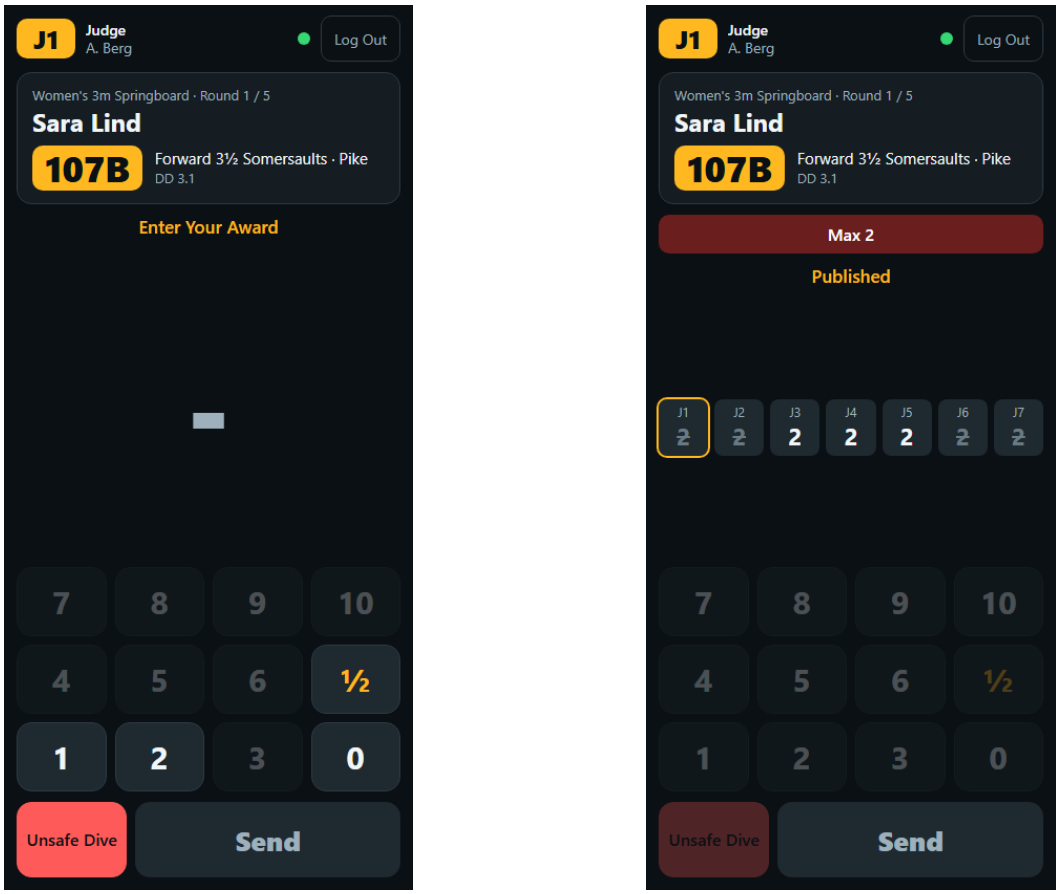



*Figure 34. The judge page on a phone: scoring open, and the panel's awards after the publish.*

The top of the page shows the seat, the role, the name, a connection dot and Log Out. Below it are the event and round, the diver, the dive number, the name of the dive and the DD.

The judge gives the award like this:

1. The page reads "Waiting for the Next Dive" until the operator clicks Open Scoring.
2. It then reads "Enter Your Award". Tap the number, and ½ for a half point.
3. Tap Send. The award turns green and the page reads "Sent".
4. To change the award, tap another number and Send again. This works until the operator publishes.

When the operator publishes, the page reads Published and shows the awards of the whole panel as recorded, without any standings (article 7.9.5).

**Unsafe Dive.** A judge who finds the dive unsafe taps Unsafe Dive (article 10.5.4.2): the award is limited to 2, and when more than half of the panel have tapped it, the desk asks the operator for Max 2.

- With Max 2 or Max 4½ on, the higher buttons are disabled and the penalty text appears on the page.
- The page follows the competition by itself; a judge does not need to reload it.
- Log Out goes back to the PIN pad. The PIN stays only in this browser tab.
- The phone polls the PC about every 0.7 seconds. A red dot and the text No Connection mean the PC cannot be reached.

## 12.7 Online Marks

The program shows which phones are connected:

- on the desk: the strip at the bottom of a judge tile is green;
- in the Judges window: a green dot in the Phone column;
- on the remote page: a green edge under the seat.

A phone counts as connected for five seconds after its last request. When a mark turns grey, the phone has gone to sleep or left the network. Type that award at the desk, or use the average when the judge has dropped out (chapter 5.2).

## 12.8 Network and Firewall

The judge page uses the same port as the remote control, port 1907.

- The setup adds the four firewall rules "divingBoard 1907 TCP/UDP IN/OUT". If phones cannot connect, run C:\divingBoard7\open_firewall_1907.bat as administrator.
- Check that the phones are on the same network as the PC. A guest Wi-Fi often keeps its devices apart.
- Only one Board7 program at a time can use port 1907 on a PC.

A dedicated Wi-Fi access point at the pool is the safest choice. Keep the phones plugged in, and switch off their sleep timer.

## 12.9 What a Judge PIN Can Do

A judge PIN opens two commands only: read the current dive and give the award of its own seat. It cannot open the operator page and it cannot start scoring, publish or change anything else. The operator PIN of the remote control is separate.

A judge cannot see the awards of the other judges on the phone.

# 13. Banner, Announce, Sponsors and Media

## 13.1 Banner

A full-screen banner with a top line, a second line and a main text, for example the start time of the next event or a countdown. Open Info > Banner.

- The three text boxes: top line, second line and main text. The main text has four versions (buttons 1-4); the selected one is shown.
- Show Clock (clock icon, appears while you type in the main text): puts {00:00} in the text: the board shows the time of day. Click again for {00:00:00} with seconds.
- Show Remaining Time (timer icon and time box): puts the time, for example {19:00}: the board counts down to 19:00 today (to tomorrow if the time has passed). Click again for seconds.
- The clock and the countdown work only when the main text holds nothing else.
- Background: the scoreboard's background video, black, or a selected video (mp4, webm, ogg) or picture (jpg, png, gif, webp).
- Sponsor: click one of the first five sponsor logos to show it on the banner; the X removes it.
- Show puts the banner on the board. Click the Game tab to go back to the scoreboard.

## 13.2 Announce

A full-screen announcement in large letters. Open Info > Announce.

- One text with four versions (buttons 1-4).
- Style list: Standard, Gradient (animated colour gradient), Shape (moving colour shapes), Stripe-H and Stripe-V (moving stripes), Stroke (outlined text with changing colours). The gear button of the styles opens the font, size, shadow and colour settings of the style.
- Background and Sponsor as for the Banner.
- Show puts it on the board; the Game tab goes back to the scoreboard.

## 13.3 Sponsors

Info > Sponsors holds the sponsor logos used by the Sponsored band (chapter 7.4), the Ad banners and the Banner and Announce screens.

- Insert Row: choose one or more picture files (bmp, gif, jpg, png, webp).
- Delete Row removes the selected logo; Clear All (the icon at the right) empties the list. Changes are saved at once.
- Set Default (the icon next to Delete Row): makes the selected logo the sponsor of Banner and Announce and moves it to the top.
- Drag a row to change the order.

## 13.4 Media Player

The Media Player tab plays videos and pictures full screen on the board output.

| Control | What It Does |
|---|---|
| 1-6 | The playlists 1 to 6. The small number shows the clips in the list. |
| List icon | The playlists 7 to 20. |
| URL | A list of web pages to show on the output (section 13.5). |
| Delete Playlist | Empties the current playlist (no question). |

| Control | What It Does |
|---|---|
| List | File Name, Thumbnail, Play (plays this clip) and Location (the time left of the playing clip). |
| Start | Plays the list from the selected clip; then reads Finish to stop. |
| Add Clip | Adds video, audio or picture files. |
| Delete Clip | Removes the selected clip. |
| Back to Game | On: returns to the scoreboard when the list ends. Off: the list starts again. |
| Sound | Sound on or off. |
| Auto Repeat | Repeats the current clip. |
| Display mode | How the picture fits the board: Stretch (default), Center, CoverCenter, Original, SizeToFit, SizeToFitCenter, ZoomCenter. |

- Pictures are shown for Image Play Duration seconds (Settings > Screen Properties, default 5).
- While a clip plays, the Settings tab shows the time left, and playlists cannot be switched.
- The Game tab stops the media and shows the scoreboard again.
- From the remote: start_playlist 1-20 starts a playlist (a second call stops it).

## 13.5 Web Pages

The URL button of the Media Player opens a list of web addresses. Insert Row adds an address, Delete Row removes one, Load shows the page on the board output. The Game tab goes back to the scoreboard.

## 13.6 Cameras and NDI Sources

The Camera tab of the Ad and CK pages shows a live picture: in the Ad multimedia area, or under the CK graphics.

1. Choose Camera, then the camera and its Format. Or choose NDI and an NDI source from the network (the refresh button searches again; "-- No NDI source found --" when there is none).
2. Click Start: the picture appears in the preview.
3. Click Show to put it on the board. Stop ends it.

The FPS value shows the frame rate. The choice is saved for the next time.

## 13.7 Screen Capture

The Screen Capture tab shows a part of the PC screen on the board, for example a results program or a web page.

1. Enter Left, Top, Width and Height of the area under Source Bounds, or click Select Rectangle and drag a frame on the screen (Esc cancels).
2. Click Start. Target Rectangle shows the size of the area it fills on the board.
3. Stop ends the capture.

An area outside the connected monitors is refused with a short notice. With a licence that includes GPU capture, the capture runs on the graphics card.

## 13.8 NDI Output

The NDI button on the Game tab sends the board output into the network as an NDI stream (60 frames per second). The stream follows what is on the output: the scoreboard of the current display mode, an info screen, Banner, Announce or a playing clip.

- Sender name: DV7_NDI (it is the value SenderName in start.xml).
- Green: sending. Amber: the stream stopped; click to restart. Grey: NDI is not available; rest the mouse on the button for the reason.
- NDI carries no transparency: for a key in the receiver use the CK display mode with a key colour (chapter 7.6).

# 14. Remote Control

## 14.1 What You Need

The remote control is a web page that a phone or tablet opens in its browser; no app is needed. It is the operator's page: it runs the flow of a dive like the desk. The judges have their own page (chapter 12). Both talk to divingBoard 7 over the network on port 1907.

- The phone or tablet and the PC are in the same network (Wi-Fi or LAN).
- The remote control is switched on (it is off on a new installation).
- Port 1907 is open in the Windows firewall. The setup adds the rules; if a phone cannot connect, run C:\divingBoard7\open_firewall_1907.bat as administrator.
- Only one Board7 program at a time can use port 1907 on a PC.

## 14.2 Switching the Remote On

Open Settings > Remote Control, or click the remote icon on the Game tab.

| Control | What It Does |
|---|---|
| Local Network | Shows the address in the local network (default). |
| Internet | Shows the public address of the internet connection (see the note below). |
| Network Adapter | The network card whose address is shown (Ethernet or Wi-Fi). |
| QR code | Scan it with the phone camera to open the remote page. |
| Address | The address to type in the phone browser, http://<PC address>:1907/logon.html. The copy button copies it. |
| Local Test | Opens the remote page in the browser of this PC. |
| Show API Commands | Opens API_Commands.txt (Appendix B). |
| PIN | The code the phone must enter: digits only, up to 6. Default 123456. |
| Save PIN | Appears when you change the PIN; click it to use the new PIN. |
| On / Off box | Ticked (red) = remote control off; not ticked = on. The text shows the real state: On or Off. |

To switch the remote on: untick the box at the bottom. The text changes to On, and the remote icon on the Game tab turns green. The setting is kept for the next start.

> **Note:** Change the PIN from 123456 before you use the remote at an event. After a PIN change, log out and log in again on every phone. Never save an empty PIN.
>
> **Note:** The Internet address only works when the router forwards TCP port 1907 to this PC. The page is protected by the PIN only and is not encrypted: use it only if you know what this means for your network.

## 14.3 Logging On

1. Open the address in the phone browser, or scan the QR code.
2. Enter the PIN on the keypad and tap the green tick.

3. The remote page opens on the Score tab.

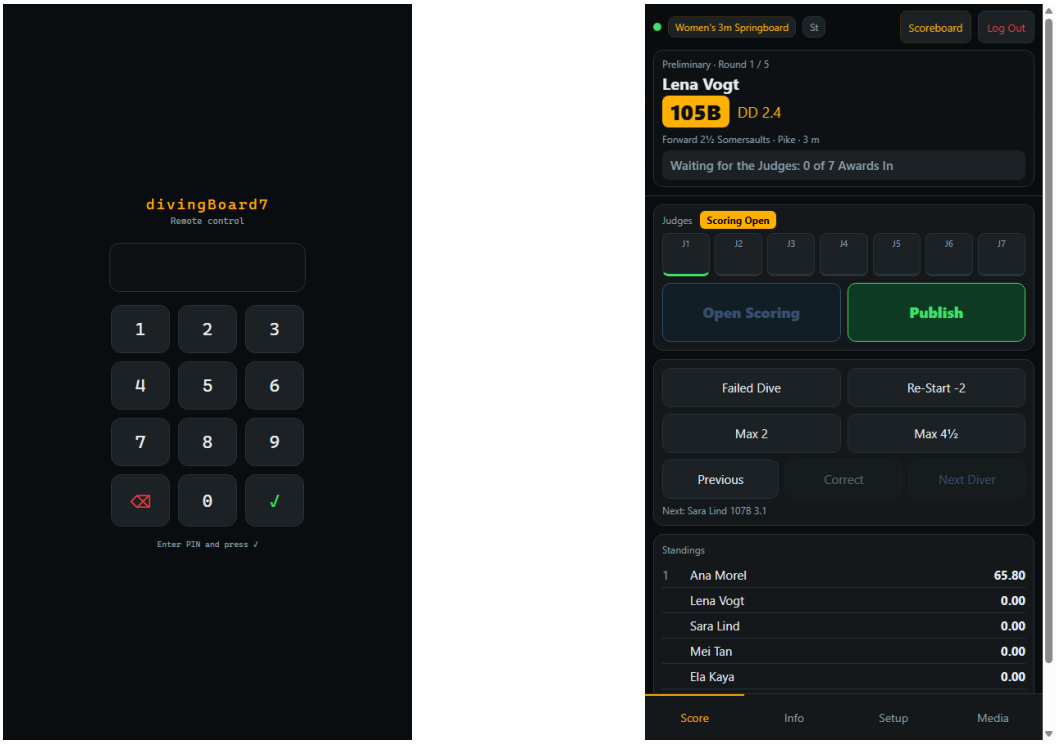



*Figure 35. The logon page and the Score tab on a phone.*

> **Note:** Logging on (and reloading the remote page) brings the scoreboard back on the PC: a running video or an info screen is taken off the board. Log on before you start a video or an info screen.

The top of the page always shows:

- the connection dot: green = connected, red = the PC cannot be reached;
- the event and the display mode (St, Sp, Ad or CK);
- Scoreboard: brings the scoreboard back on the board (takes off a video or info screen); Log Out: back to the logon page;
- the stage and round, the diver, the dive number, the DD, the points once published, and the name of the dive;
- a red message for a few seconds when the program refuses an action.

The page checks the PC about twice a second, so it also shows changes made on the PC and by the judges.

## 14.4 Score Tab

| Element | What It Does |
|---|---|
| Judges | One tile per seat with its award and the state of the dive. A green edge means the judge's phone is connected; a cancelled award is crossed out. While scoring is open, tap a tile to type the award for that seat. |
| Open Scoring | Opens the current dive for the judges. |
| Publish | Publishes the dive. If awards are missing it asks before it uses the rule's average. |
| Failed Dive, Re-Start -2, Max 2, Max 4½ | Switch the referee's penalties on and off. |

| Element | What It Does |
|---|---|
| Previous, Next Diver | Move through the running order. |
| Correct | Takes a published dive back to scoring. |
| Next Stage / Finish | Appears when the stage is complete, and asks first. |
| Next | The next diver with dive and DD. |
| Standings | The top eight of the stage. |

Repeat Dive is not on the remote page; use the desk, or the command repeat of the HTTP API.

## 14.5 Info Tab

| Element | What It Does |
|---|---|
| Display | St, Sp, Ad, CK: switches the display mode. |
| Info Screens | One button per info screen. The screen on air is highlighted; tap it again to hide it. The screens show the competition as it stands and the data set in the editors on the PC. |
| Hide the Screen | Takes any info screen off. |

## 14.6 Setup Tab

| Element | What It Does |
|---|---|
| Clock | Tap the time to type a new one (m:ss or h:mm:ss); Play / Pause; Stop pauses the clock. Not for the time of day. |
| Competition Title, Venue | The two text lines of the board. |
| Auto Publish | Switches Auto Publish on and off. It is highlighted while on (chapter 5.9). |
| New Match | Starts the scores of this competition again, after the question "Start the Scores of This Competition Again?". The dive sheets stay. |

Text fields open a sheet with the text, Set and Close. A new line in a text becomes a line break on the board.

> **Note:** New Match on the remote page stores a copy of the competition in the archive, then clears the scores (chapter 6.2).

## 14.7 Media Tab

Type the number of a playlist on the keypad (C clears), then:

- Start: plays that playlist of the Media Player (1-20). If a playlist already plays, Start stops it.
- Start on Ad: switches to the Advertisement mode and plays that playlist of the Ad page (1-6).

- Scoreboard: back to the scoreboard.

## 14.8 Tablets and Tips

On a tablet or a phone in landscape (900 pixels and wider) the page shows two columns of cards.

- The buttons are large enough for a thumb; Open Scoring and Publish are the largest.
- Add the page to the home screen of the phone for a full-screen app look.
- Only one person should run the flow at a time: the PC does not stop a remote and the desk from acting on the same dive.
- If the connection dot turns red, check the Wi-Fi of the phone and that the program still runs on the PC.

# 15. HTTP API

divingBoard 7 can be controlled by other programs and devices with plain web requests: a vision-mixer macro, a stream deck, a scoring system or a script. The remote page of chapter 14 uses the same commands, and the judge page of chapter 12 uses two commands of its own.

## 15.1 Request Format

```
http://<PC address>:1907/api.html?_=<number>&pin=<PIN>&cmd=<command>&value=<value>$
```

- Port 1907 is fixed. The remote control must be on (chapter 14).
- Every request ends with $.
- _=<number> (any changing number, first) stops browsers and proxies from answering from their cache.
- PIN is the operator PIN of the remote control, or a judge's seat PIN for the judge commands.
- Leave out &value= when the command has no value. Encode the value: a space as %20, | as %7C, ~ as %7E.
- In text values an underscore _ is a line break.

Replies: !<command> = accepted; #Invalid PIN; #Invalid API Request (wrong address or missing $); #Invalid API Command (no command). GET and the judge commands return XML. Every other command is answered with !, also one that does nothing.

An action the competition refuses also answers ! and changes nothing. The reason is in the fields Refusal and RefusalSerial of the GET reply.

Examples:

```
http://127.0.0.1:1907/api.html?_=1&pin=123456&cmd=open_scoring$
http://127.0.0.1:1907/api.html?_=2&pin=123456&cmd=award&value=0%7C7.5$
http://127.0.0.1:1907/api.html?_=3&pin=123456&cmd=publish$
http://127.0.0.1:1907/api.html?_=4&pin=123456&cmd=info_show&value=Standings%7CStandings.Top=8$
```

## 15.2 Reading the State

cmd=GET (in capitals) returns the state as XML: the event, stage and round, the diver, the dive, the state of the dive, the awards, the standings, the board and the clock. Serial changes with every change of the competition. Appendix B.2 lists the fields. A panel can poll it about twice a second.

## 15.3 Command Groups

| Group | Commands |
|---|---|
| Flow of a dive | open_scoring, award, publish, reopen, repeat, penalty, next_diver, prev_diver, next_stage, auto_publish, new_match |
| Judges | judge_get, judge_award |
| Board and clock | match, click, set_chronometer, line_text_1, line_text_2 |
| Info screens | info_show, info_hide, info_set, info_list |
| Media | start_playlist, start_playlist_ad_screen |
| State | GET |

Appendix B describes every command. The file API_Commands.txt in C:\divingBoard7 (Settings > Remote Control > Show API Commands) has the same reference.

> **Note:** new_match from the API clears the scores without a question; a copy goes to the archive first. Build a confirmation into your own panel or macro.
>
> **Note:** publish with the value force publishes with the rule's average for the missing judges. Use it only after a question to the operator.

## 15.4 Compatibility with soccerBoard 7

The remote protocol is shared with the Board7 family. Soccer command names without a diving meaning stay accepted, are logged and have no effect (Appendix B.4). The GET reply also carries the shared field names: Home is the current diver, Guest the team, HomeScore the running total, Period the round, and Extra01 and Extra02 the title and the venue.

# 16. Keyboard Shortcuts

## 16.1 Keyboard Hook Manager

The flow of a dive and the referee's penalties can be run with keys of the numeric keypad. The shortcuts are global: they work while another program (for example the vision-mixer software) has the focus.

Open the Keyboard Hook Manager with the keyboard icon on the Game tab.

1. Tick Enable Global Keyboard Shortcuts. The shortcuts are off on a new installation.
2. To change a key, click its box, then press the new key. Right click a box to clear it.
3. Click Save & Apply. Cancel closes without saving.

The keyboard icon on the Game tab is green while the shortcuts are on.

## 16.2 Default Keys

| Action | Key | Action | Key |
|---|---|---|---|
| Open Scoring | Num 0 | Publish | Num Enter |
| Next Diver | Num 6 | Previous Diver | Num 4 |
| Failed Dive | Num 7 | Re-Start -2 | Num 8 |
| Max 2 | Num 9 | Max 4½ | Num + |
| Correct | Num − | Clock Play / Pause | Num / |

The boxes of the Keyboard Hook Manager show the key names of Windows: NumPad0, NumPadEnter, Add, Subtract and Divide. The numeric-keypad Enter and the main Enter are different keys.

- An installation updated from an earlier version keeps its saved keys; new actions start without a key.
- Repeat Dive and the awards have no shortcut. You can give any action a function key instead.

## 16.3 Good to Know

- NumLock must be on: with NumLock off the numeric keypad sends other keys and the Num 0-9 shortcuts do not work.
- A key pressed together with Ctrl, Shift or Alt is ignored.
- Holding a key repeats the action: tap the keys, do not hold them. The penalty keys switch on and off, so a held key can leave them in either state.
- The key also reaches the program that has the focus. Keep the cursor out of text fields of other programs while you work, or the digit is typed there too.
- While the cursor is in a judge tile, the title, the venue or the clock, the numpad types into that box and no shortcut runs.
- Next Diver on the keyboard waits for Publish, like the button on the desk.
- Publish on the keyboard asks the usual question when awards are missing.
- While you assign keys with the shortcuts switched on, pressing an assigned key also performs its action. Switch the shortcuts off (untick, Save & Apply) before you reassign keys.

# 17. Languages and Translations

## 17.1 Choosing the Language

The program speaks 46 languages: English, Turkish, Albanian, Azerbaijani, Bosnian, Bulgarian, Chinese, Czech, German, Danish, Spanish, Finnish, French, Georgian, Greek, Croatian, Hungarian, Indonesian, Hindi, Persian, Icelandic, Italian, Japanese, Kyrgyz, Khmer, Korean, Kazakh, Macedonian, Mongolian, Malay, Dutch, Norwegian, Polish, Portuguese, Romanian, Serbian, Russian, Arabic, Swedish, Slovenian, Thai, Tajik, Turkmen, Swahili, Uzbek and Vietnamese.

1. Open Settings > Language, or click the flag at the top right of the Game tab.
2. Choose the language in Select Language.
3. Click the disk icon next to the list. The program shows "New Language Selected! Please Restart Application."
4. Restart divingBoard 7.

The language applies to the program, the texts on the boards, the reports, the dive names, the remote page and the judge page. The remote and judge pages follow the new language at once; the program after the restart.

## 17.2 Editing Translations

Every text of the program can be changed:

1. Choose the language in Select Language.
2. Find the text in the list: English on the left, the translation on the right.
3. Select the translation and press F2, type the new text, press Enter.
4. Click Save. The texts change after the next start.

- Names in braces, for example {0}, are filled in by the program; keep them.
- Translations other than English and Turkish were made by machine translation. Corrections by native speakers are welcome; please send them to support.
- An update of the program keeps your translations and only adds the texts of new features.

## 17.3 Titles

The Titles tab holds two group names, Players and Coach. The diving screens do not use them, so you can leave them as they are. Change the text and click Save if you want to.

## 17.4 Factory Texts

Set Factory Reset copies the factory texts back:

- On the Language tab: all texts of all languages, at once and without a question. Your own changes are lost. Use it after an update to get the new wording of existing texts.
- On the Titles tab: the titles in the program language.

The factory texts are in common\xml\langFactory.xml; your texts are in common\xml\lang.xml. Copy lang.xml to a safe place before a factory reset if you want to keep your changes.

# 18. Settings Reference

## 18.1 The Settings Tab

| Button | Opens | Chapter |
|---|---|---|
| License (and ? for License Info) | The licence page | 3 |
| Screen Properties | The board position and size and the other settings below | 18.2 |
| [St]andard / [Sp]onsored / [Ad]vertisement / [CK] Board Design | The design editor. Only the button of the current display mode is enabled. | 8 |
| Remote Control | The remote control page | 14 |
| Language | Language and translations | 17 |
| Youtube Tutorials | Opens the video tutorials in the web browser | – |

## 18.2 Screen Properties

A change takes effect when you leave the cell; there is no Save button. An empty value is not accepted.

| Row | Default | Values | What It Does |
|---|---|---|---|
| L: Left | 0 | Pixels | X position of the board windows on the Windows desktop |
| T: Top | 0 | Pixels | Y position of the board windows |
| W: Width | 960 | Pixels, up to Max Resolution | Width of the board windows |
| H: Height | 540 | Pixels, up to Max Resolution | Height of the board windows (in Sp the sponsor band is part of it) |
| Max Resolution | From the licence | Read only | The largest width and height |
| Background Video Opacity | 6 | 0-10 | Strength of the background video behind the boards and info screens |
| Image Play Duration | 5 | 1-120 seconds | How long a picture stays in a Media Player playlist |
| Source on mode switch | Manual | Manual, Restore | Restarts the Ad or CK source when you come back to that mode (chapter 7.7) |
| Line Through Cancelled Awards | Yes | Yes, No | Yes: cancelled awards are dimmed and struck through on the boards, info screens, desk, reports and operator page. No: dimmed only. |

## 18.3 Where Other Settings Are

| Setting | Where |
|---|---|
| Display mode | Game tab: St, Sp, Ad, CK |
| Design | Game tab: Select Design (chapter 8) |
| Event type, title, venue, date, referee | Game tab: New Competition (chapter 6) |
| Event types and their limits | Game tab: Event Types (chapter 6.3) |
| Dive numbers and DD | Game tab: Dive Table (chapter 6.10) |
| Judges, seat PINs, Auto Publish delay | Game tab: Judges (chapter 12.2) |
| Auto Publish | Game tab: the tick box under the flow buttons (chapter 5.9) |
| Sponsor band (place, height, content) | Sp page (chapter 7.4) |
| Ad layout and banners | Ad page > Settings and Banner (chapter 7.5) |
| Chroma key colour | CK page > Settings (chapter 7.6) |
| Info screen background | Info tab > gear button (chapter 9.1) |
| Keyboard shortcuts | Game tab: keyboard icon (chapter 16) |
| Remote control, PIN | Settings > Remote Control (chapter 14) |
| Clock mode (timer, countdown, time of day) | Game tab: right click on the clock (chapter 5.11) |
| Media Player display mode and sound | Media Player tab (chapter 13.4) |
| NDI sender name | start.xml, value SenderName in the NDI section (edit only while the program is closed) |

All settings are stored in C:\divingBoard7\start.xml (and config*.xml). The program saves them at once; a copy of the previous version is kept as start.xml.bak.

# 19. Troubleshooting and FAQ

## 19.1 The Board Is Black or Empty

The boards are drawn by the Microsoft Edge WebView2 Runtime. If it is missing, a notice says "WebView2 Runtime is not installed. The scoreboard cannot render." with the download address https://developer.microsoft.com/microsoft-edge/webview2/. Install the runtime and restart the program.

If the board engine keeps crashing, the program switches to software rendering and says so. Restart the program; update the graphics driver if it happens again.

## 19.2 Display Scaling

Set the Windows display scaling of the board monitor to 100 % (Windows Settings > System > Display > Scale). The program does not adapt to other scaling: at 125 % or 150 % Windows enlarges it, the picture becomes slightly blurred and the board position and size in Screen Properties are counted in scaled pixels.

## 19.3 Fonts

The setup installs the fonts of the boards, and the program also loads them from C:\divingBoard7\common\font at every start. If a board shows a wrong font, run the font installation again as administrator:

```
powershell -ExecutionPolicy Bypass -File C:\divingBoard7\install_fonts.ps1
```

Then restart the program.

## 19.4 Licence Checks (USB and WMI)

- At start the program reads the Computer ID (up to 30 seconds) and looks for USB sticks (up to 8 seconds), then continues in any case.
- If Windows cannot report the hardware data (WMI), the Computer ID shows ?WMI-UNAVAILABLE, the program runs in DEMO and a notice suggests "winmgmt /verifyrepository". Run that command as administrator, restart the PC and the program.
- A USB stick plugged in after the start is not seen: restart the program.
- An expired licence or a PC clock set back gives DEMO without a message. Check ? License Info on the License page and the Windows date and time.

## 19.5 Network and Firewall

| Problem | Fix |
|---|---|
| The phone cannot open the remote or judge page | Remote control on? (Settings > Remote Control, box not ticked.) Phone and PC in the same network? Address and port 1907 correct? |
| Still no connection | Run C:\divingBoard7\open_firewall_1907.bat as administrator. It adds the four "divingBoard 1907" firewall rules if they are missing. Check other firewall or security software. |
| The QR code of a seat does not open the page | Choose another Network Address in the Judges window: the phone must reach the address in the code. Print new cards if you use them. |

| Problem | Fix |
|---|---|
| The judge page asks for the PIN again | The PINs were renewed with New PINs, or the seat is beyond the panel of the running event. |
| "Remote control unavailable: port 1907 is in use" | Another Board7 program (for example soccerBoard 7) or a second copy of divingBoard 7 uses the port. Close it and click Retry. |
| The phone shows a green dot but nothing changes | The PIN was changed on the PC: log out and log in again. |

## 19.6 NDI

- Grey NDI button: the NDI runtime cannot be used on this PC. Rest the mouse on the button for the reason, repair or reinstall divingBoard 7, and restart.
- Amber NDI button: the stream stopped; click it to start again.
- The source does not appear in the receiver: PC and receiver in the same network, NDI not blocked by the firewall; the sender is called DV7_NDI.
- NDI sources for the Camera tab are searched in the network; click the refresh button if a new source is missing.

## 19.7 Log Files

The program writes a log file per day: C:\divingBoard7\logs\dv7_yyyy-MM-dd.log (kept for 14 days). Send the log of the day of the problem to support. It contains the program and runtime versions, the licence mode and the Computer ID (never the licence key), the remote and NDI events and a status line every 10 seconds.

## 19.8 Damaged Settings Files

Every settings file is saved safely with a backup copy. If a file is damaged (for example after a power cut), the program restores it from the backup and keeps the damaged copy as <file>.corrupt-<date>; the log names the file.

To start with fresh settings: close the program and rename start.xml. The program creates a new one with the first-start values (chapter 2.3). The licence file stays valid.

## 19.9 FAQ

**The boards show DEMO every 10 seconds.** No valid licence was found at start. Check Settings > License; after entering a key, restart. With a USB licence, plug the stick in before you start the program.

**"License Key Not Valid!"** The key belongs to another PC or stick, or to another Board7 product. After a hardware change send the new Computer ID to support.

**The board is in the wrong place or has the wrong size.** Set L, T, W and H in Settings > Screen Properties (chapter 7.2). Use 100 % display scaling.

**Publish does nothing, or says "Waiting for awards".** An award is missing. The desk asks whether to use the average; click Yes only when a judge has dropped out (chapter 5.2).

**The awards do not appear on the board.** The board shows the awards after Publish, not before (chapter 5.10).

**Next Diver is grey.** The dive is not published yet (chapter 5.7).

**What do I do next?** Read the guide bar over the diver card. It names the next step, and the button that does it has a gold frame.

**Next Stage is grey.** A dive of the stage is not published. Every entry that has not withdrawn needs a published dive in every round. Mark a withdrawn diver with WD (chapter 10.2).

**I published a wrong award.** Select the dive, click Correct, change the award and click Publish (chapter 5.6).

**"This dive is not in the table for this height and position".** Check the number and the position. A dive that is really allowed can be added in the Dive Table (chapter 6.10).

**A dive sheet shows a warning.** Sheet warnings are advice; nothing stops the operator. The referee decides (chapter 10.4).

**A change in the Dive Table or the event type has no effect.** A competition keeps its own copy of the event type, and the sheets keep their DD. Create a new competition, or enter the dive again (chapters 6.1 and 6.10).

**Dive Score is empty on the board.** It needs a published dive. Show it after Publish and before Next Diver (chapter 9.5).

**A shortcut key does nothing.** Switch the shortcuts on in the Keyboard Hook Manager and check NumLock (chapter 16).

**A penalty switched on while I typed an award.** The shortcuts were on and a keypad digit also ran its shortcut (chapter 16.3).

**My translations changed after an update.** They did not: an update only adds new texts. Set Factory Reset brings the factory texts back for all languages (chapter 17.4).

**I started the program twice.** Close one copy with its Close button. Only one copy should run.

**How do I close the program safely?** With the X in the title bar of divingBoard 7 and Yes. The competition and the settings are saved.

**An info screen shows old values.** Info screens are built when you click Show. Click Show again after the data changed (chapter 9.2).

**The CK lower third does not go away.** Click Hide in the editor, or Hide Lower Third on the CK page (chapter 9.15).

**The clock shows the time of day.** Right click the clock on the Game tab until it shows Timer (chapter 5.11).

**The phone remote stopped a video on the board.** Logging on and reloading the remote page bring the scoreboard back on the PC. Log on before you start a video (chapter 14.3).

**My NDI receiver shows a green picture.** That is the Chroma Key display mode with the key colour. Key it in the receiver, or switch to the Standard mode (chapter 7.6).

**The Sponsored band is missing.** The Sponsored band appears only in the Sp display mode. Check its height and place on the Sp page > Settings (chapter 7.4).

# 20. Screen Reference

This chapter shows every page and window of divingBoard 7. Each picture has numbered badges, and the table below it says what each numbered control does. The chapters before this one explain how the parts work together; use this chapter when you want to know what one button does.

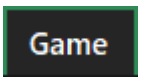
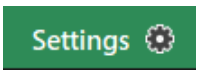
> **Note:** The pictures were taken during a competition. A button that looks grey is disabled at that moment, and its description says when it becomes available.

## 20.1 The Menu Bar

The title bar and the green menu bar stay at the top of the window on every tab.




*Figure 36. The title bar and the menu bar.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 |  | **Tall Window** | Sets the window to normal state and switches its height: 1024 by 640 at the bottom right, or full working-area height 1024 wide at the right edge. |
| 2 |  | **Wide Window** | Sets the window to normal state at 640 high and switches its width between 1024 and the full working-area width. |
| 3 |  | **Minimize** | Minimizes the program window; pressing it again on a minimized window restores it. |
| 4 |  | **Maximize** | Maximizes the program window, or restores it if it is already maximized. |
| 5 |  | **Close** | Asks for confirmation and, if confirmed, shuts the program down in an orderly way. |
| 6 |  | **Game** | Opens the Game desk, where the competition is run. The active menu button is shown darker. |
| 7 |  | **Media Player** | Opens the Media Player page for playing videos and playlists on the board. |
| 8 |  | **Info** | Opens the Info page, where the information screens are shown on the board. |
| 9 |  | **Stats** | Opens the Stats page with the competition results. |
| 10 |  | **Settings** | Opens the Settings tab. While a video plays on the board the button shows the playing time instead of its name. |

A fifth tab appears next to Stats when the display mode is Sp, Ad or CK. It carries the name of the mode and opens the page of that mode (sections 20.8 to 20.10).

## 20.2 Game: The Diving Desk

The desk is where a competition runs. Chapter 5 explains the flow; the scenarios of chapter 21 show it step by step.

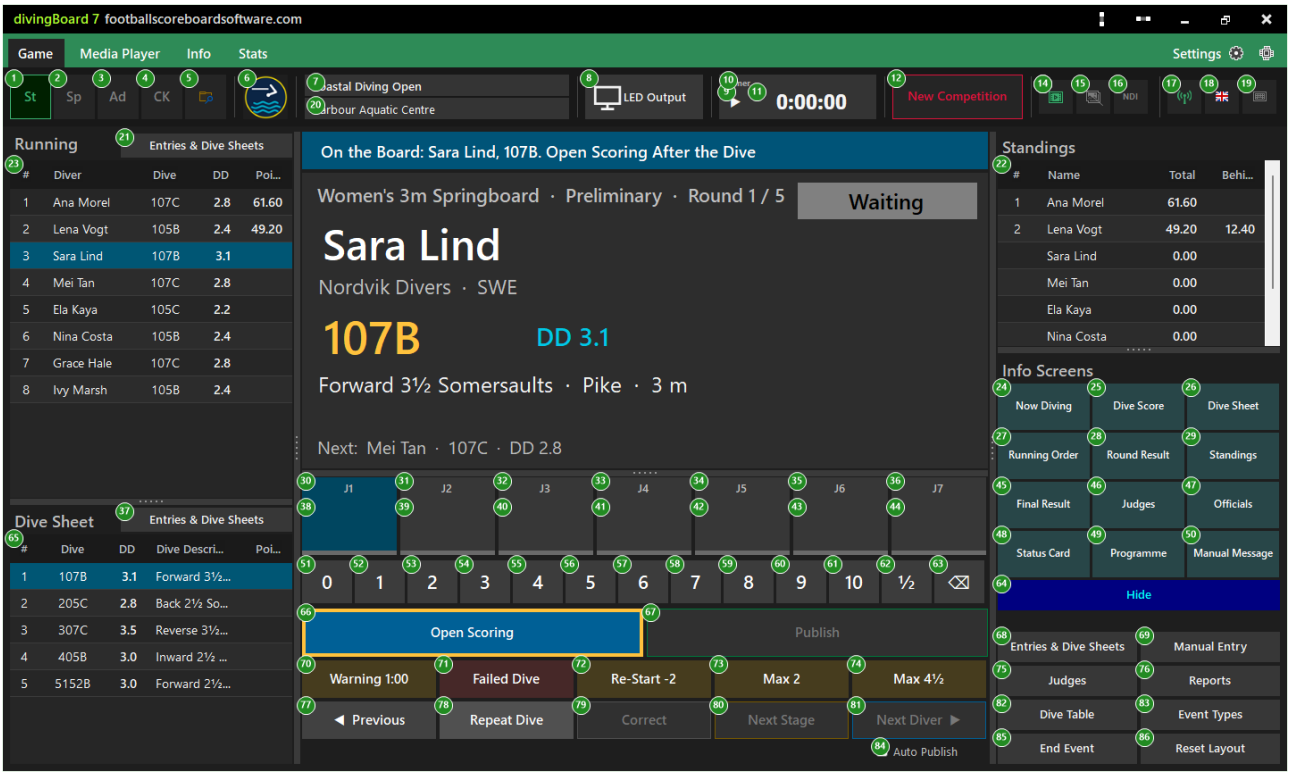
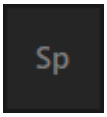
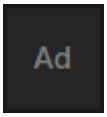
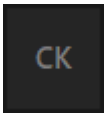
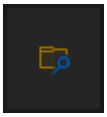
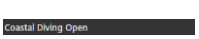
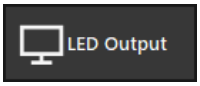
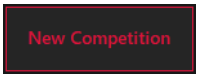
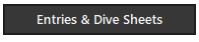
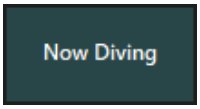
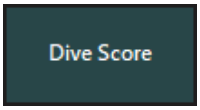
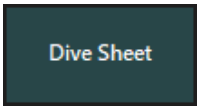
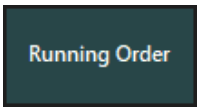
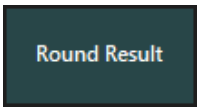
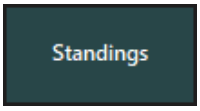
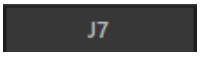
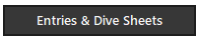
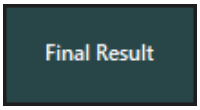
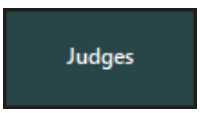
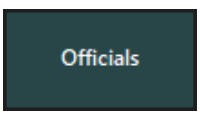


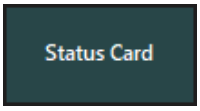
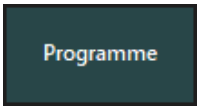
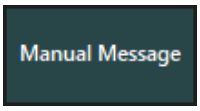
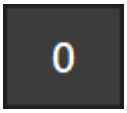

*Figure 37. The diving desk during a preliminary.*

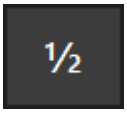
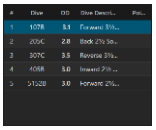
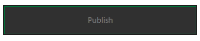
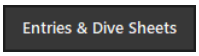
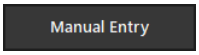
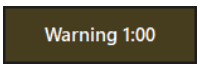
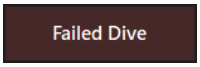
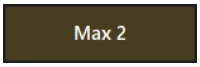
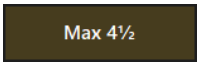
| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 |  | **Standard View** | Switches the board to the standard display mode. The active mode is shown in green. |
| 2 |  | **Sponsored View** | Switches the board to the sponsored display mode. The active mode is shown in green. |
| 3 |  | **Advertisement View** | Switches the board to the advertisement display mode. The active mode is shown in green. |
| 4 |  | **Chroma Key View** | Switches the board to the chroma key display mode (for video mixing). The active mode is shown in green. |
| 5 |  | **Select Design** | Opens the design list for the current display mode, where a design is previewed, applied, renamed or deleted. |
| 6 |  | **Board Logo** | Opens a file dialog to choose the logo shown on the board; the choice is saved. A small button on the logo removes it. |
| 7 |  | **Competition Title** | The first line of the board; the text is saved and shown on the board. A new competition fills it with its title. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 8 |  | **LED Output** | Opens the LED Output window, where the position and size of the board output and the screen it fills are set. |
| 9 |  | **Clock Start / Pause** | Starts or pauses the clock. It is hidden in Time of Day mode, and a countdown at zero cannot be started. |
| 10 |  | **Clock Mode** | Shows the mode of the clock; a click (or a right click on the clock) cycles Timer, Countdown and Time of Day. A new mode starts stopped at zero. |
| 11 |  | **Clock** | Shows the clock. In Timer and Countdown mode a time typed as h:mm:ss, m:ss or seconds sets it when the box is left or Enter is pressed; in Time of Day it is read only. A right click cycles the mode. |
| 12 |  | **New Competition** | Opens the New Competition window to create a competition, open one from the archive or clear the scores. When the window is confirmed the clock is reset and the info screen data starts again. |
| 13 |  | **Clear Background Video** | Removes the background video from the board and redraws it. The button appears only while a video is set. |
| 14 |  | **Background Video** | Opens a file dialog to choose the video that plays behind the board; the choice is saved and the board redraws. The icon is lit while a video is set. |
| 15 |  | **Middle Layer Image** | Opens a file dialog to choose the image shown in the middle layer of the board; the choice is saved and the board redraws. The icon is lit while an image is set. |
| 16 |  | **NDI** | Starts or stops the NDI stream of the board. If the NDI runtime is missing or the stream cannot start, the button turns grey and the tooltip gives the reason; an amber button means the stream stopped and a click restarts it. |
| 17 |  | **Remote Control** | Opens the remote control settings, where the remote server and the phone links are set. The icon shows whether the remote is on. |
| 18 |  | **Language Settings** | Opens the language settings, where the language of the program is chosen. |
| 19 |  | **Keyboard Shortcuts** | Opens the keyboard shortcut window, where a key is assigned to each desk function. The icon is green while the global shortcuts are enabled. |
| 20 |  | **Venue** | The second line of the board; the text is saved and shown on the board. A new competition fills it with its venue. |
| 21 |  | **Entries & Dive Sheets** | Opens Entries and Dive Sheets with the current diver already selected. |
| 22 |  | **Standings** | Shows the ranking of the current stage with totals and the gap to the leader. Equal totals share a rank. The grid is read only. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 23 |  | **Running Order** | Lists the divers of the current stage in diving order with their dive, degree of difficulty and points. A click on a row makes that diver current; a double click opens Entries and Dive Sheets. Withdrawn entries show their mark. |
| 24 |  | **Now Diving** | Sends the Now Diving screen with the current diver and dive to the board; a second click takes it off. The button is lit while the screen is on air, and the screen follows the competition when the diver or dive changes. |
| 25 |  | **Dive Score** | Sends the Dive Score screen with the awards and points of the dive to the board; a second click takes it off. The button is lit while the screen is on air, and the screen follows the competition when the diver or dive changes. |
| 26 |  | **Dive Sheet** | Sends the dive sheet of the current diver to the board; a second click takes it off. The button is lit while the screen is on air, and the screen follows the competition when the diver or dive changes. |
| 27 |  | **Running Order** | Sends the running order list to the board; a second click takes it off. The button is lit while the screen is on air, and the screen follows the competition when the diver or dive changes. |
| 28 |  | **Round Result** | Sends the result of the round to the board; a second click takes it off. The button is lit while the screen is on air, and the screen follows the competition when the diver or dive changes. |
| 29 |  | **Standings** | Sends the standings table to the board; a second click takes it off. The button is lit while the screen is on air, and the screen follows the competition when the diver or dive changes. |
| 30 |  | **Judge 1 Seat** | Names the judge seat; a click on it selects the seat's award box. The bar below the tile is green while that judge's phone is connected. Only the seats of the event's panel are shown. |
| 31 |  | **Judge 2 Seat** | Names the judge seat; a click on it selects the seat's award box. The bar below the tile is green while that judge's phone is connected. Only the seats of the event's panel are shown. |
| 32 |  | **Judge 3 Seat** | Names the judge seat; a click on it selects the seat's award box. The bar below the tile is green while that judge's phone is connected. Only the seats of the event's panel are shown. |
| 33 |  | **Judge 4 Seat** | Names the judge seat; a click on it selects the seat's award box. The bar below the tile is green while that judge's phone is connected. Only the seats of the event's panel are shown. |
| 34 |  | **Judge 5 Seat** | Names the judge seat; a click on it selects the seat's award box. The bar below the tile is green while that judge's phone is connected. Only the seats of the event's panel are shown. |
| 35 |  | **Judge 6 Seat** | Names the judge seat; a click on it selects the seat's award box. The bar below the tile is green while that judge's phone is connected. Only the seats of the event's panel are shown. |
| 36 |  | **Judge 7 Seat** | Names the judge seat; a click on it selects the seat's award box. The bar below the tile is green while that judge's phone is connected. Only the seats of the event's panel are shown. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 37 |  | **Entries & Dive Sheets** | Opens Entries and Dive Sheets with the current diver already selected. |
| 38 |  | **Judge 1 Award** | Shows and takes the award of this judge seat for the current dive (0 to 10 in half points). Enter stores it and moves to the next seat; an empty box clears the award. It is read only unless scoring is open, and an invalid value is refused on the message line. Awards from the judges' phones appear here at once. |
| 39 |  | **Judge 2 Award** | Shows and takes the award of this judge seat for the current dive (0 to 10 in half points). Enter stores it and moves to the next seat; an empty box clears the award. It is read only unless scoring is open, and an invalid value is refused on the message line. Awards from the judges' phones appear here at once. |
| 40 |  | **Judge 3 Award** | Shows and takes the award of this judge seat for the current dive (0 to 10 in half points). Enter stores it and moves to the next seat; an empty box clears the award. It is read only unless scoring is open, and an invalid value is refused on the message line. Awards from the judges' phones appear here at once. |
| 41 |  | **Judge 4 Award** | Shows and takes the award of this judge seat for the current dive (0 to 10 in half points). Enter stores it and moves to the next seat; an empty box clears the award. It is read only unless scoring is open, and an invalid value is refused on the message line. Awards from the judges' phones appear here at once. |
| 42 |  | **Judge 5 Award** | Shows and takes the award of this judge seat for the current dive (0 to 10 in half points). Enter stores it and moves to the next seat; an empty box clears the award. It is read only unless scoring is open, and an invalid value is refused on the message line. Awards from the judges' phones appear here at once. |
| 43 |  | **Judge 6 Award** | Shows and takes the award of this judge seat for the current dive (0 to 10 in half points). Enter stores it and moves to the next seat; an empty box clears the award. It is read only unless scoring is open, and an invalid value is refused on the message line. Awards from the judges' phones appear here at once. |
| 44 |  | **Judge 7 Award** | Shows and takes the award of this judge seat for the current dive (0 to 10 in half points). Enter stores it and moves to the next seat; an empty box clears the award. It is read only unless scoring is open, and an invalid value is refused on the message line. Awards from the judges' phones appear here at once. |
| 45 |  | **Final Result** | Sends the final result table to the board; a second click takes it off. The button is lit while the screen is on air, and the screen follows the competition when the diver or dive changes. |
| 46 |  | **Judges** | Sends the judges panel with the award of each seat to the board; a second click takes it off. The button is lit while the screen is on air, and the screen follows the competition when the diver or dive changes. |
| 47 |  | **Officials** | Sends the list of officials to the board; a second click takes it off. The button is lit while the screen is on air. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 48 |  | **Status Card** | Sends the status card (warm-up, break, protest and so on) to the board; a second click takes it off. The button is lit while the screen is on air. |
| 49 |  | **Programme** | Sends the programme of events to the board; a second click takes it off. The button is lit while the screen is on air. |
| 50 |  | **Manual Message** | Sends the message typed in Manual Entry to the board; a second click takes it off. The button is lit while the screen is on air. |
| 51 |  | **Award Key 0** | Enters 0 as the award of the selected seat and moves the mark to the next seat. It is refused on the message line unless scoring is open. |
| 52 |  | **Award Key 1** | Enters 1 as the award of the selected seat and moves the mark to the next seat. It is refused on the message line unless scoring is open. |
| 53 |  | **Award Key 2** | Enters 2 as the award of the selected seat and moves the mark to the next seat. It is refused on the message line unless scoring is open. |
| 54 |  | **Award Key 3** | Enters 3 as the award of the selected seat and moves the mark to the next seat. It is refused on the message line unless scoring is open. |
| 55 |  | **Award Key 4** | Enters 4 as the award of the selected seat and moves the mark to the next seat. It is refused on the message line unless scoring is open. |
| 56 |  | **Award Key 5** | Enters 5 as the award of the selected seat and moves the mark to the next seat. It is refused on the message line unless scoring is open. |
| 57 |  | **Award Key 6** | Enters 6 as the award of the selected seat and moves the mark to the next seat. It is refused on the message line unless scoring is open. |
| 58 |  | **Award Key 7** | Enters 7 as the award of the selected seat and moves the mark to the next seat. It is refused on the message line unless scoring is open. |
| 59 |  | **Award Key 8** | Enters 8 as the award of the selected seat and moves the mark to the next seat. It is refused on the message line unless scoring is open. |
| 60 |  | **Award Key 9** | Enters 9 as the award of the selected seat and moves the mark to the next seat. It is refused on the message line unless scoring is open. |
| 61 |  | **Award Key 10** | Enters 10 as the award of the selected seat and moves the mark to the next seat. It is refused on the message line unless scoring is open. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 62 |  | **Award Key Half** | Adds a half point to the award just entered (for example 7 becomes 7.5), taken from the seat before the marked one when the marked seat is still empty. It does nothing for a 10 and is refused unless scoring is open. |
| 63 |  | **Award Key Clear** | Clears the award of the selected seat. It is refused unless scoring is open. |
| 64 |  | **Hide** | Takes the info screen off the board. |
| 65 |  | **Dive Sheet** | Shows the dive sheet of the current diver, one line per round of the stage, with the current round selected. The grid is read only; dives are changed in Entries and Dive Sheets. |
| 66 |  | **Open Scoring** | Opens scoring for the current dive so that the judges (phones or the tiles) can enter awards; the dive status changes to Scoring Open. It is disabled when the dive is already open or published, or when it is a failed dive or has points typed by hand, which are published directly. |
| 67 |  | **Publish** | Publishes the current dive: the awards are scored and the points go to the standings and the board. If some awards are missing it asks whether to publish with the rule's average for the missing judges; with no awards at all it is refused. It is disabled until scoring is open (or the dive is failed or has points typed by hand). |
| 68 |  | **Entries & Dive Sheets** | Opens Entries and Dive Sheets, where divers, running order and dive lists are managed. |
| 69 |  | **Manual Entry** | Opens the Manual Entry window (one window; a second click brings it forward) to change the current dive, type its points by hand or show a free message on the LED. |
| 70 |  | **Warning 1:00** | Starts the one minute count after the referee's warning (article 8.5.5); the button shows the seconds left and a second click cancels it. At zero it turns red and the message line says the referee declares a failed dive; the dive is not failed automatically. A change of diver cancels the count. |
| 71 |  | **Failed Dive** | Toggles the failed dive penalty for the current dive: it scores 0 points and can be published without awards. On a published dive the points are recalculated at once. |
| 72 |  | **Re-Start -2** | Toggles the re-start penalty: 2 points are deducted from each award of the current dive. On a published dive the points are recalculated at once. |
| 73 |  | **Max 2** | Toggles the cap of 2 points on every award of the current dive (referee decision, for example an unsafe dive). On a published dive the points are recalculated at once. |
| 74 |  | **Max 4½** | Toggles the cap of 4.5 points on every award of the current dive (arms at the entry). On a published dive the points are recalculated at once. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 75 | Judges | **Judges** | Opens the Judges window with the seat names, PINs, QR cards for the judges' phones and the Auto Publish delay. |
| 76 | Reports | **Reports** | Opens the report viewer for printing or saving results, score sheets and the start list. |
| 77 | ◀ Previous | **Previous** | Moves back to the previous active diver in the running order, across rounds, without a confirmation. |
| 78 | Repeat Dive | **Repeat Dive** | After a confirmation, sets the awards of the current dive aside for an appeal (articles 8.4.4, 8.4.5 and 8.5.6), clears them and puts the dive back to waiting. |
| 79 | Correct | **Correct** | Takes the published dive back to scoring with its awards kept, so an award can be corrected and the dive published again. It is enabled only for a published dive. |
| 80 | Next Stage | **Next Stage** | After a confirmation, closes the finished stage and starts the next one with the qualifying divers in reverse order of rank; lots are drawn between equal totals (article 4.1.8) and shown on the message line. On the last stage the button reads Finish and finishes the competition. It is disabled until every dive of the stage is published. |
| 81 | Next Diver ▶ | **Next Diver** | Moves to the next active diver, or to the next round at the end of the order. It is enabled only when the current dive is published (or the diver has left) and more dives remain in the stage. |
| 82 | Dive Table | **Dive Table** | Opens the Dive Table editor with the degree of difficulty of every dive, position and height. |
| 83 | Event Types | **Event Types** | Opens the Event Types editor, where the rules, rounds and stages of each kind of event are set. |
| 84 | ☐ Auto Publish | **Auto Publish** | When ticked, a dive is published automatically once every award is in (or the dive is failed) and the delay set in Judges has passed. When off, the operator presses Publish. The setting is saved. |
| 85 | End Event | **End Event** | After a confirmation, ends the event now (article 8.4.2.2); the results count up to the last completed round. |
| 86 | Reset Layout | **Reset Layout** | After a confirmation, puts the splitters and column widths of the desk back to the factory layout. |

## 20.3 Windows of the Desk

### New Competition

Opens from New Competition on the desk. See chapter 6.

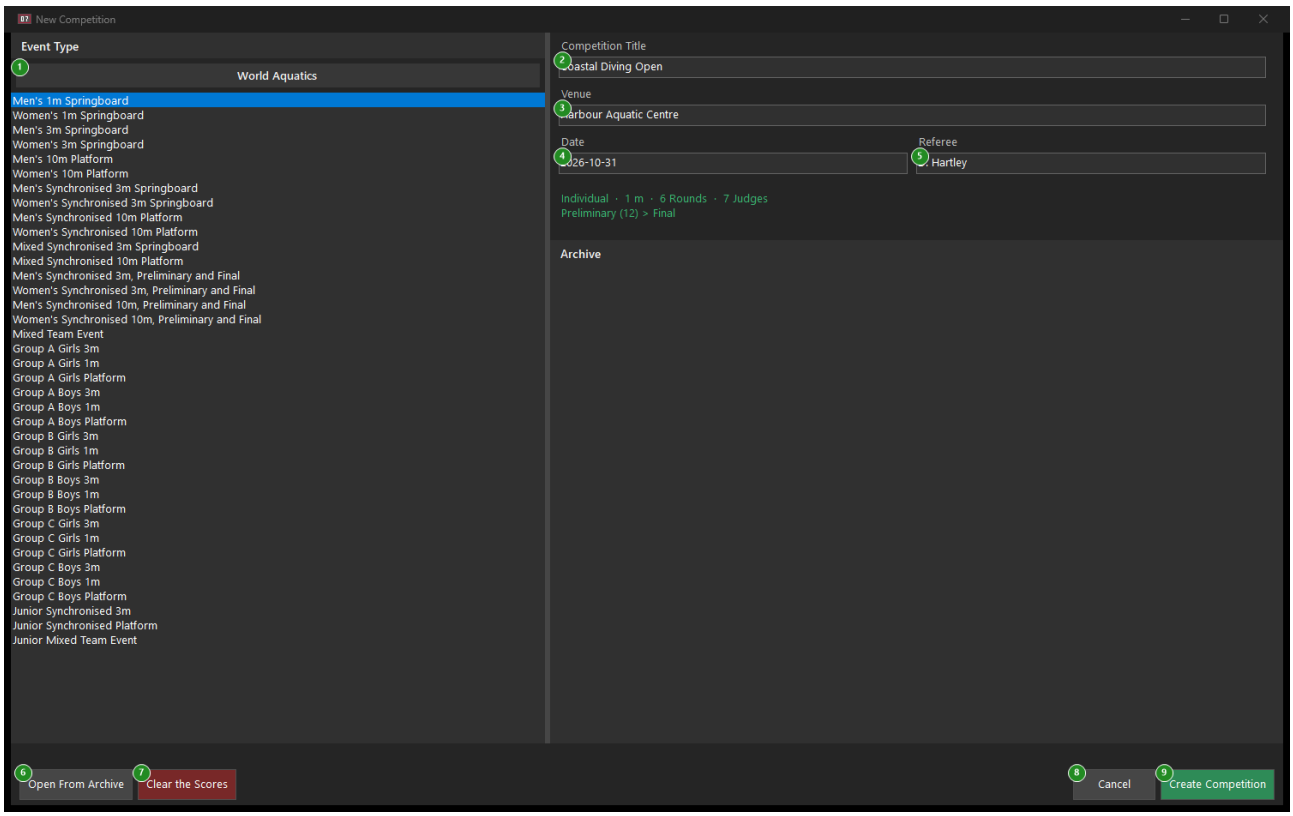



*Figure 38. The New Competition window.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | | **Rule Set** | Opens the list of rule sets that narrows the event types shown. |
| 2 | | **Competition Title** | The title of the new competition; it is also shown on the first board line. |
| 3 | | **Venue** | The venue of the new competition; it is also shown on the second board line. |
| 4 | | **Date** | The date of the new competition, typed as yyyy-MM-dd. |
| 5 | | **Referee** | The name of the referee of the new competition, used on the reports. |
| 6 | Open From Archive | **Open From Archive** | After a confirmation, archives the running competition and opens the one selected in the archive list. A double click on the list does the same. |
| 7 | Clear the Scores | **Clear the Scores** | After a confirmation, archives the running competition and starts its scores again. |
| 8 | Cancel | **Cancel** | Closes the window without changing anything. |
| 9 | Create Competition | **Create Competition** | After a confirmation, archives the running competition and creates a new one from the selected event type with the title, venue, date and referee entered; the board lines take the title and venue. A double click on an event type does the same. |

## Entries and Dive Sheets

Opens from the tool button, or from the Entries and Dive Sheets button above the Running Order and the Dive Sheet, or with a double click on a row of the Running Order. See chapter 10.

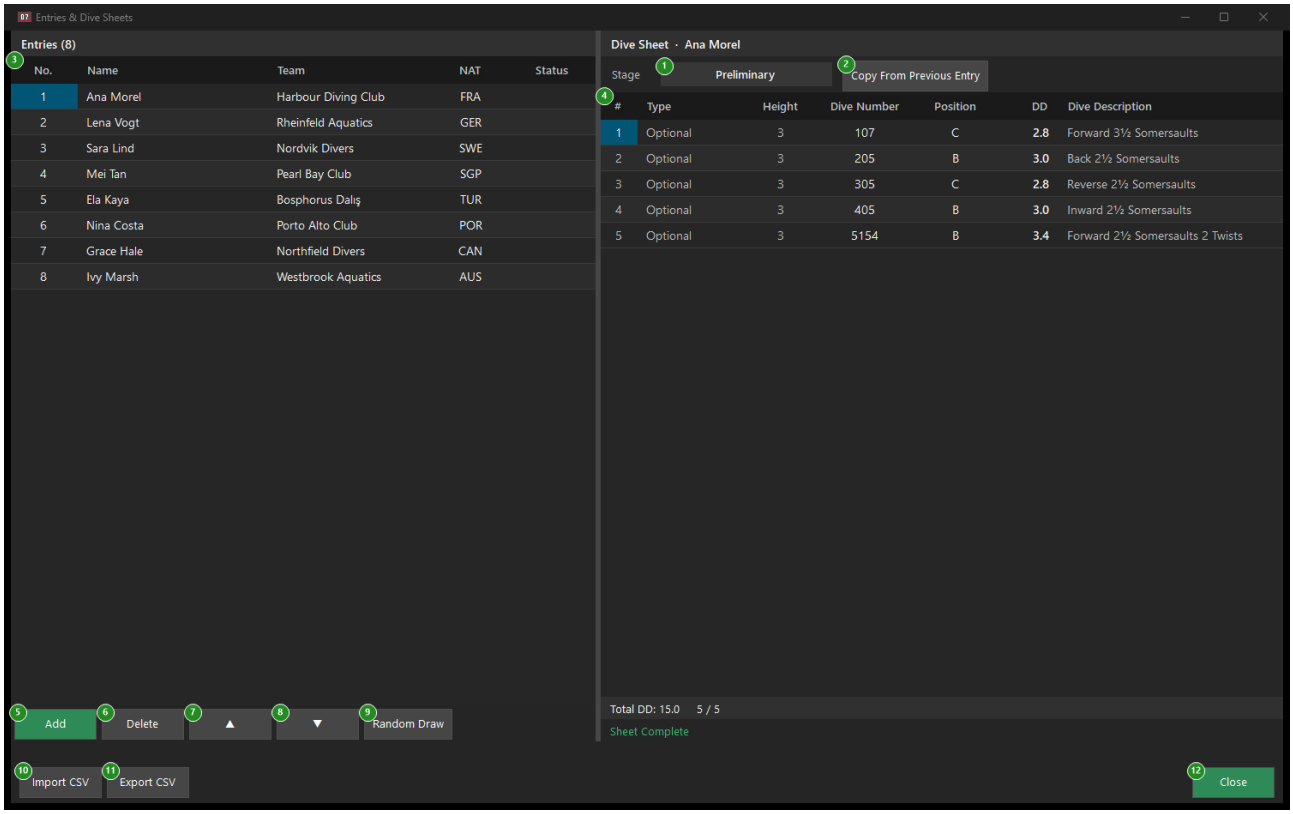
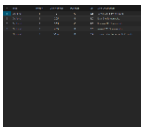



*Figure 39. The Entries and Dive Sheets window.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | Preliminary | **Stage** | Opens the list of stages; the dive sheet shows the rounds of the chosen stage. |
| 2 | Copy From Previous Entry | **Copy From Previous Entry** | Copies the dives of the chosen stage from the entry above the selected one to the selected entry, leaving published dives untouched. |
| 3 |  | **Entries** | Lists the entries in start order. Number, name, partner (synchronised events), team, NAT, grade (US formats) and status can be edited. A status of DNS, WD or DSQ takes the entry out of the running order; before a stage has started the next ranked entry of the previous stage comes in (article 4.1.12). A new start number rebuilds the order. |
| 4 |  | **Dive Sheet** | Shows the dive sheet of the selected entry, one line per round of the chosen stage. Type a dive number (for example 107C, with suggestions for the round's height) and choose the position; the degree of difficulty and description follow, and the difficulty can be overtyped. An empty number removes a dive that is still waiting; published dives are locked. Warnings about repeats, groups and limits are advice only. |
| 5 | Add | **Add** | Adds a new entry called New Diver at the end and starts editing its name. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 6 | Delete | **Delete** | After a confirmation, deletes the selected entry and its dive sheet. It is refused for an entry that has scores; use the WD status instead. |
| 7 | ▲ | **Move Up** | Swaps the start number of the selected entry with the one above it. |
| 8 | ▼ | **Move Down** | Swaps the start number of the selected entry with the one below it. |
| 9 | Random Draw | **Random Draw** | After a confirmation, draws a new running order of the first stage by lot (article 4.1.6). It is refused once a dive has been published. |
| 10 | Import CSV | **Import CSV** | Opens a CSV file (Name;Partner;Team;NAT;Grade;dive numbers such as 107C) and adds one entry per line with its dives. The message line reports how many entries were imported and the first problems. |
| 11 | Export CSV | **Export CSV** | Saves the entries and their dive numbers to a CSV file. |
| 12 | Close | **Close** | Ends editing, saves the changes to the competition and closes the window. |

## Judges

See chapter 12.

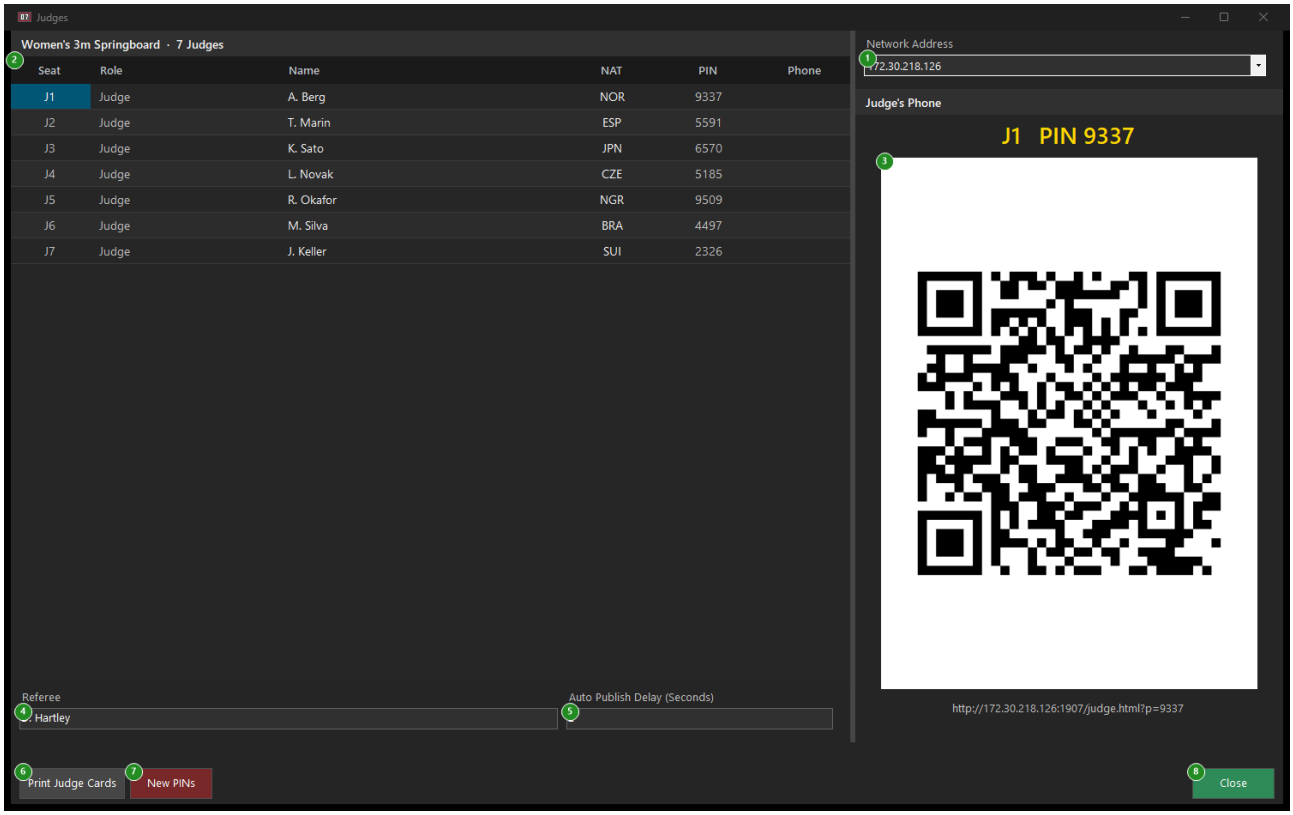
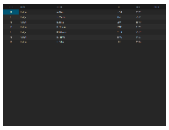
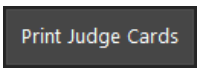
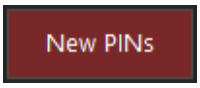
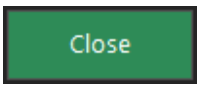



*Figure 40. The Judges window: names, PINs and the QR code of the selected seat.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 |  | **Network Address** | The address of this PC that is put into the QR codes and links; choose the one on the network the judges' phones use. |
| 2 |  | **Judges** | Lists the seats of the panel with role, name, NAT, PIN and a green mark while the judge's phone is connected. Name and NAT can be edited; selecting a seat shows its QR code. |
| 3 |  | **Judge QR Code** | Shows the QR code of the selected seat; a phone that scans it opens the judge page for that seat only. Display only. |
| 4 |  | **Referee** | The name of the referee, saved with the competition when the window closes and used on the reports. |
| 5 |  | **Auto Publish Delay (Seconds)** | The seconds Auto Publish waits after the last award before publishing (0 to 30). Saved when the window closes. |
| 6 |  | **Print Judge Cards** | Opens a printable page with one card per judge seat, showing the seat, name, QR code, PIN and link. |
| 7 |  | **New PINs** | After a confirmation, makes new random PINs for every seat; the judges' phones must log in again. |
| 8 |  | **Close** | Saves the judge names, countries, referee name and Auto Publish delay, and closes the window. |

## Dive Table

See chapter 6.

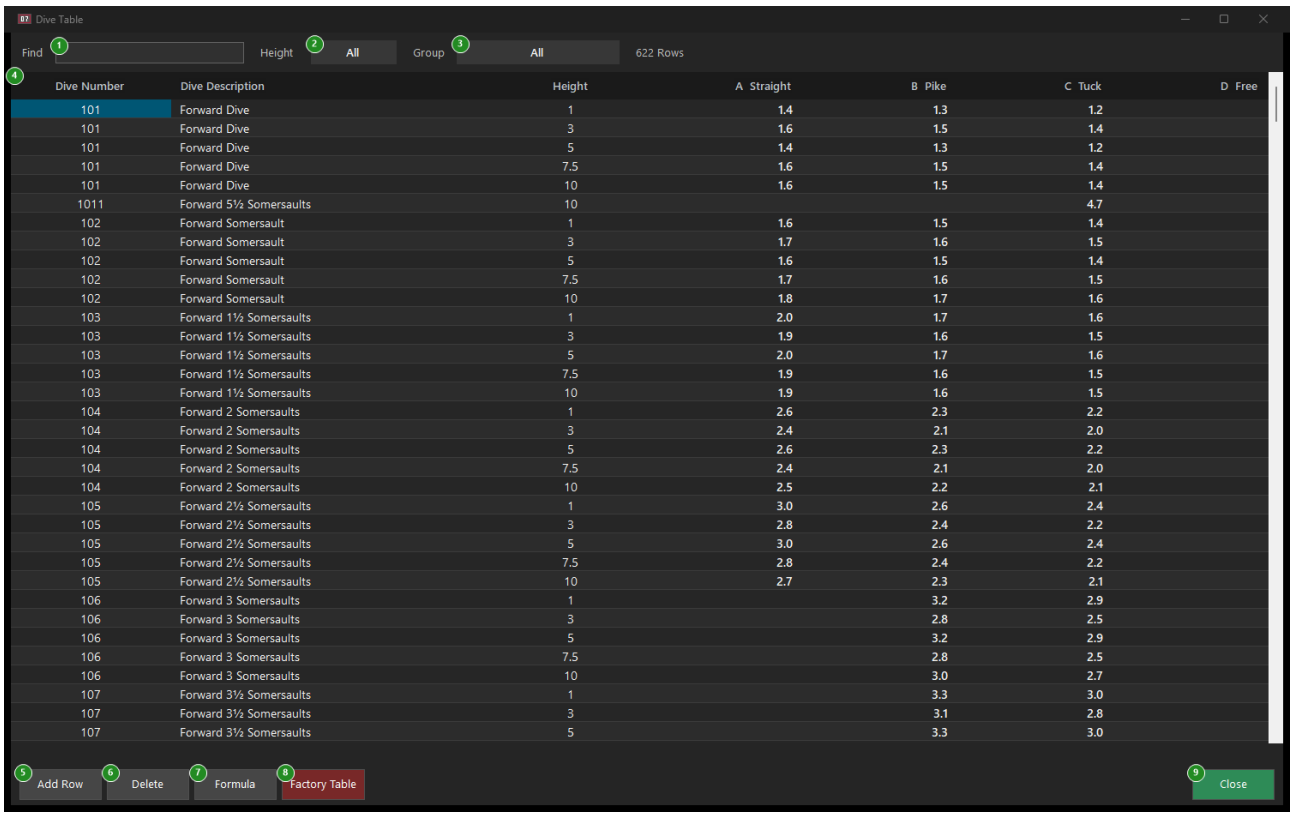



*Figure 41. The Dive Table window.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | | **Find** | Narrows the table to the dives whose number or description contains the typed text. |
| 2 | All | **Height** | Opens the list that narrows the table to one height. |
| 3 | All | **Group** | Opens the list that narrows the table to one dive group. |
| 4 | | **Dives** | Lists each dive and height with the degree of difficulty for positions A, B, C and D. Every cell can be edited (an invalid value is refused); values that differ from the factory table are gold. Changes are saved when the window closes. |
| 5 | Add Row | **Add Row** | Adds an empty row (at the chosen height) at the end and starts editing its dive number. |
| 6 | Delete | **Delete** | After a confirmation, deletes the degrees of difficulty of the dive at the height of the selected row. |
| 7 | Formula | **Formula** | Fills the degrees of difficulty of the selected row from the World Aquatics formula. |
| 8 | Factory Table | **Factory Table** | After a confirmation, replaces the dive table with the factory table; your changes are lost. |
| 9 | Close | **Close** | Saves the dive table if it was changed and closes the window. |

## Event Types

See chapter 6.

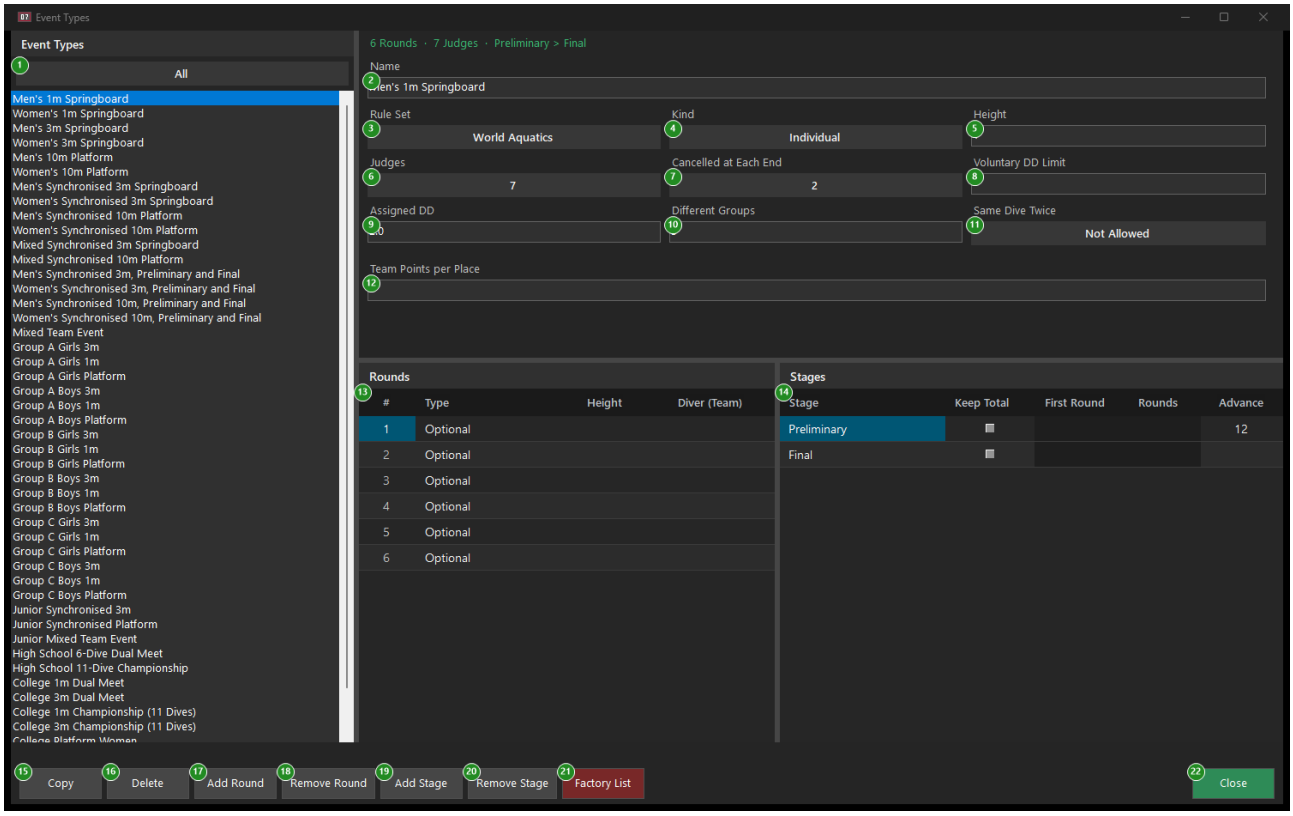
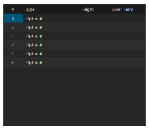


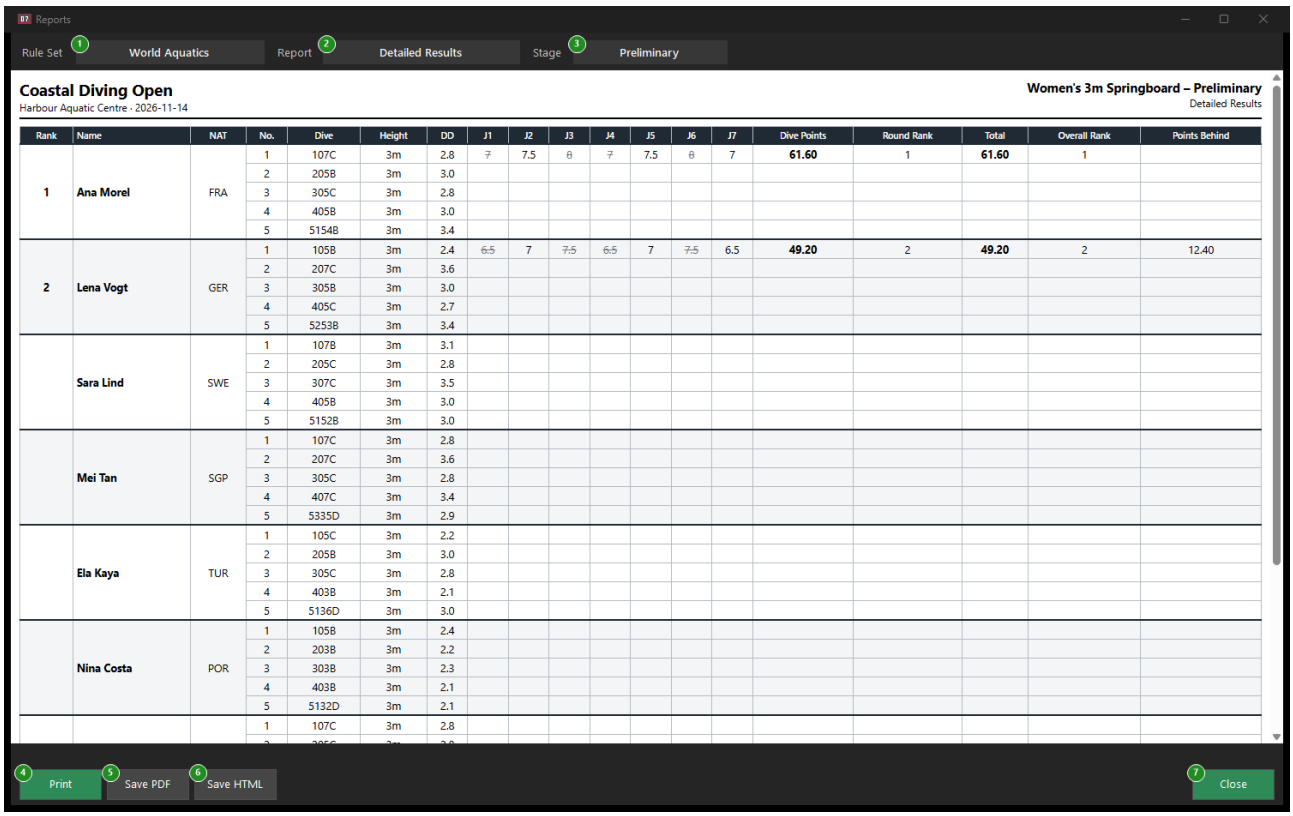

*Figure 42. The Event Types window.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | All | **Filter by Rule Set** | Opens the list that narrows the event types on the left to one rule set, or shows all of them. |
| 2 | | **Name** | The name of the event type, shown in the list and on the desk. |
| 3 | World Aquatics | **Rule Set** | Opens the list of rule sets (World Aquatics, US high school, US college, custom) for the event type. |
| 4 | Individual | **Kind** | Opens the list of kinds: individual, synchronised or team. |
| 5 | 1 | **Height** | The height of the board or platform of the event in metres. |
| 6 | 7 | **Judges** | Opens the list of panel sizes: 3, 5, 7, 9 or 11 judges. |
| 7 | 2 | **Cancelled at Each End** | Opens the list of how many of the highest and lowest awards are cancelled before the rest are added (0 to 4). |
| 8 | | **Voluntary DD Limit** | The limit on the total degree of difficulty of the voluntary (limited) rounds; empty means no limit. |
| 9 | 2.0 | **Assigned DD** | The fixed degree of difficulty used for assigned rounds. |
| 10 | 3 | **Different Groups** | The number of different dive groups a dive sheet must contain; empty means no minimum. A sheet that falls short is flagged in Entries and Dive Sheets. |
| 11 | Not Allowed | **Same Dive Twice** | Opens the list that sets whether the same dive may be used twice on a sheet (Not Allowed or Allowed). |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 12 | | **Team Points per Place** | The points given to the places of a team ranking, typed as a list in the form used by the factory types. |
| 13 |  | **Rounds** | Lists the rounds of the event type. The type (optional, voluntary or assigned), the height and the performer (F, M or S, for team events) can be edited. |
| 14 |  | **Stages** | Lists the stages of the event type. Name, Keep Total (the total continues from the earlier stage), first round, number of rounds and how many divers advance can be edited; first round and rounds apply only when Keep Total is ticked. |
| 15 | Copy | **Copy** | Makes a copy of the selected event type, with the word Copy added to the name, and selects the name for editing. |
| 16 | Delete | **Delete** | After a confirmation, deletes the selected event type. The last remaining type cannot be deleted. |
| 17 | Add Round | **Add Round** | Adds an empty round at the end of the selected event type. |
| 18 | Remove Round | **Remove Round** | Removes the last round of the selected event type; one round always remains. |
| 19 | Add Stage | **Add Stage** | Adds a stage at the end of the selected event type. |
| 20 | Remove Stage | **Remove Stage** | Removes the last stage of the selected event type; one stage always remains. |
| 21 | Factory List | **Factory List** | After a confirmation, replaces all event types with the factory list; your changes are lost. |
| 22 | Close | **Close** | Checks every event type and saves the list. If a type is not valid the window stays open and the message line names it. A running competition keeps the copy it was created from. |

## Reports

See chapter 11.




| Rank | Name | NAT | No. | Dive | Height | DD | J1 | J2 | J3 | J4 | J5 | J6 | J7 | Dive Points | Round Rank | Total | Overall Rank | Points Behind |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Ana Morel | FRA | 1 | 107C | 3m | 2.8 | ~~7~~ | 7.5 | ~~8~~ | ~~7~~ | 7.5 | ~~8~~ | 7 | **61.60** | 1 | **61.60** | 1 | |
| | | | 2 | 205B | 3m | 3.0 | | | | | | | | | | | | |
| | | | 3 | 305C | 3m | 2.8 | | | | | | | | | | | | |
| | | | 4 | 405B | 3m | 3.0 | | | | | | | | | | | | |
| | | | 5 | 5154B | 3m | 3.4 | | | | | | | | | | | | |
| 2 | Lena Vogt | GER | 1 | 105B | 3m | 2.4 | ~~6.5~~ | 7 | ~~7.5~~ | ~~6.5~~ | 7 | ~~7.5~~ | 6.5 | **49.20** | 2 | **49.20** | 2 | 12.40 |
| | | | 2 | 207C | 3m | 3.6 | | | | | | | | | | | | |
| | | | 3 | 305B | 3m | 3.0 | | | | | | | | | | | | |
| | | | 4 | 405C | 3m | 2.7 | | | | | | | | | | | | |
| | | | 5 | 5253B | 3m | 3.4 | | | | | | | | | | | | |
| | Sara Lind | SWE | 1 | 107B | 3m | 3.1 | | | | | | | | | | | | |
| | | | 2 | 205C | 3m | 2.8 | | | | | | | | | | | | |
| | | | 3 | 307C | 3m | 3.5 | | | | | | | | | | | | |
| | | | 4 | 405B | 3m | 3.0 | | | | | | | | | | | | |
| | | | 5 | 5152B | 3m | 3.0 | | | | | | | | | | | | |
| | Mei Tan | SGP | 1 | 107C | 3m | 2.8 | | | | | | | | | | | | |
| | | | 2 | 207C | 3m | 3.6 | | | | | | | | | | | | |
| | | | 3 | 305C | 3m | 2.8 | | | | | | | | | | | | |
| | | | 4 | 407C | 3m | 3.4 | | | | | | | | | | | | |
| | | | 5 | 5335D | 3m | 2.9 | | | | | | | | | | | | |
| | Ela Kaya | TUR | 1 | 105C | 3m | 2.2 | | | | | | | | | | | | |
| | | | 2 | 205B | 3m | 3.0 | | | | | | | | | | | | |
| | | | 3 | 305C | 3m | 2.8 | | | | | | | | | | | | |
| | | | 4 | 403B | 3m | 2.1 | | | | | | | | | | | | |
| | | | 5 | 5136D | 3m | 3.0 | | | | | | | | | | | | |
| | Nina Costa | POR | 1 | 105B | 3m | 2.4 | | | | | | | | | | | | |
| | | | 2 | 203B | 3m | 2.2 | | | | | | | | | | | | |
| | | | 3 | 303B | 3m | 2.3 | | | | | | | | | | | | |
| | | | 4 | 403B | 3m | 2.1 | | | | | | | | | | | | |
| | | | 5 | 5132D | 3m | 2.1 | | | | | | | | | | | | |
| | | | 1 | 107C | 3m | 2.8 | | | | | | | | | | | | |

*Figure 43. The Reports window.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | World Aquatics | **Rule Set** | Opens the list of rule sets (World Aquatics, US high school, US college); the report types and the layout follow. |
| 2 | Detailed Results | **Report** | Opens the list of reports available for the rule set (for example detailed results, results, score sheet, meet results, start list); the page is rebuilt on choosing. |
| 3 | Preliminary | **Stage** | Opens the list of stages; the report is built for the chosen stage. |
| 4 | Print | **Print** | Opens the print dialog for the report shown. |
| 5 | Save PDF | **Save PDF** | Asks for a file name and saves the report as a PDF. |
| 6 | Save HTML | **Save HTML** | Asks for a file name and saves the report as an HTML page. |
| 7 | Close | **Close** | Closes the report window. |

## Manual Entry

Stays open beside the desk. See section 5.18.

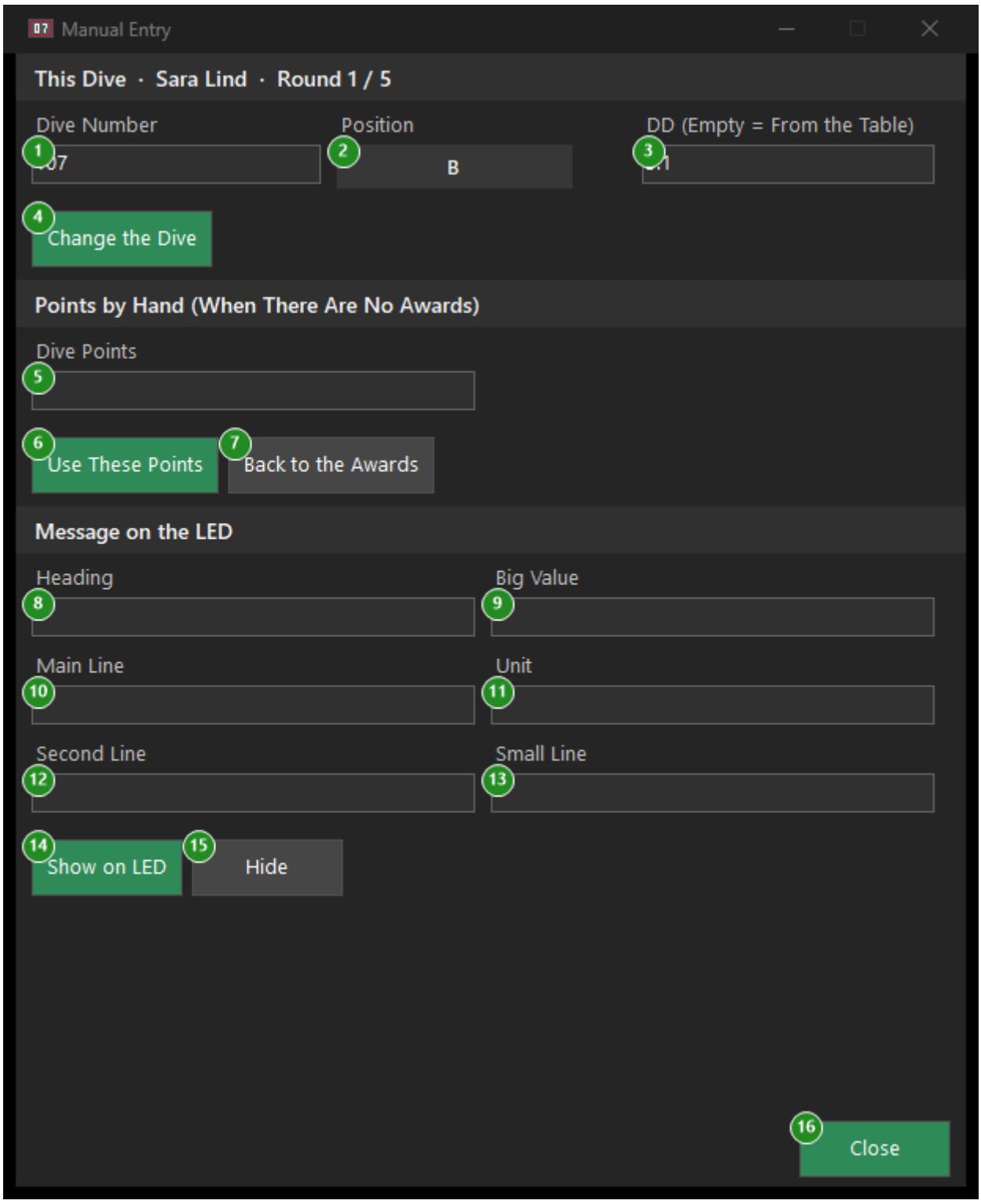



*Figure 44. The Manual Entry window.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | 107 | **Dive Number** | The dive number of the current dive, for example 107C; a letter at the end sets the position. It follows the desk unless it is being edited. |
| 2 | B | **Position** | Opens the list of positions A, B, C and D for the current dive. |
| 3 | 3.1 | **DD (Empty = From the Table)** | The degree of difficulty for the changed dive; a value equal to the current one is ignored and an empty box uses the table. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 4 | Change the Dive | **Change the Dive** | Replaces the dive number, position and degree of difficulty of the current diver and round. It asks for the position when none is given and is refused when there is no current diver. |
| 5 | | **Dive Points** | The points to use for the current dive when there are no awards; it shows the points already set by hand. |
| 6 | Use These Points | **Use These Points** | Sets the points of the current dive to the typed value (0 to 1000) for a dive without awards; the dive can then be published directly. It is refused for a published dive or an invalid number. |
| 7 | Back to the Awards | **Back to the Awards** | Removes the points typed by hand so that the dive is scored from the awards again. |
| 8 | | **Heading** | The heading of the manual message. |
| 9 | | **Big Value** | The large value of the manual message. |
| 10 | | **Main Line** | The main line of the manual message. |
| 11 | | **Unit** | The unit shown beside the big value of the manual message. |
| 12 | | **Second Line** | The second line of the manual message. |
| 13 | | **Small Line** | The small line of the manual message. |
| 14 | Show on LED | **Show on LED** | Saves the message fields and shows the manual message on the board. |
| 15 | Hide | **Hide** | Takes the info screen off the board. |
| 16 | Close | **Close** | Saves the message fields and closes the window. |

## LED Output

Stays open beside the desk. Every change moves the board at once. See chapter 7.

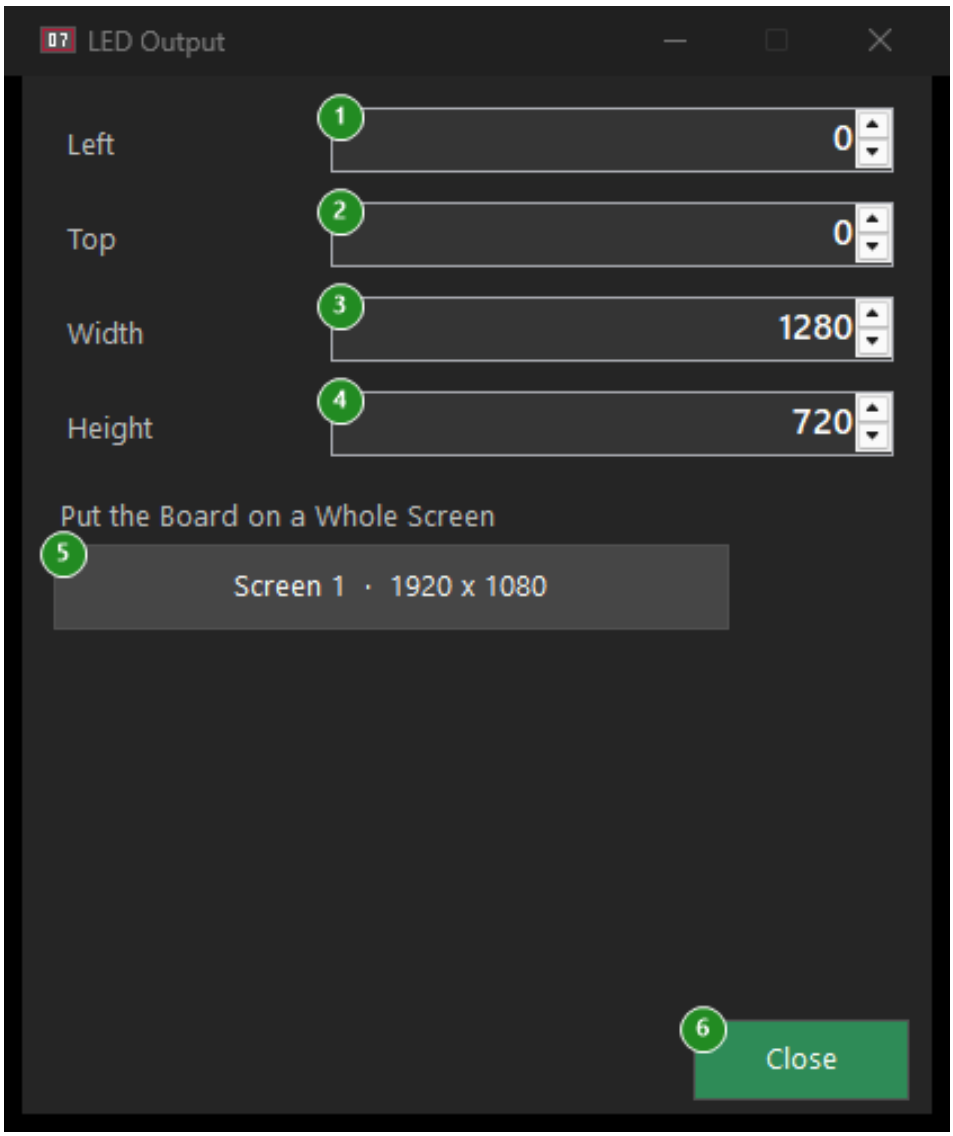



*Figure 45. The LED Output window, with one button per screen of this PC.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | 0 | **Left** | The left edge of the board output window in pixels. The board follows every change at once and the value is saved a moment later. |
| 2 | 0 | **Top** | The top edge of the board output window in pixels. The board follows every change at once and the value is saved a moment later. |
| 3 | 1280 | **Width** | The width of the board output window in pixels, limited to the maximum resolution. The board follows every change at once and the value is saved a moment later. |
| 4 | 720 | **Height** | The height of the board output window in pixels, limited to the maximum resolution. The board follows every change at once and the value is saved a moment later. |
| 5 | Screen 1 · 1920 x 1080 | **Screen 1** | Puts the board on the whole of this screen by setting left, top, width and height to the screen. There is one such button for each screen of the PC. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 6 | Close | **Close** | Saves any pending change and closes the window. |

## Keyboard Hook Manager

Opens from the keyboard icon at the right of the banner. See chapter 16.

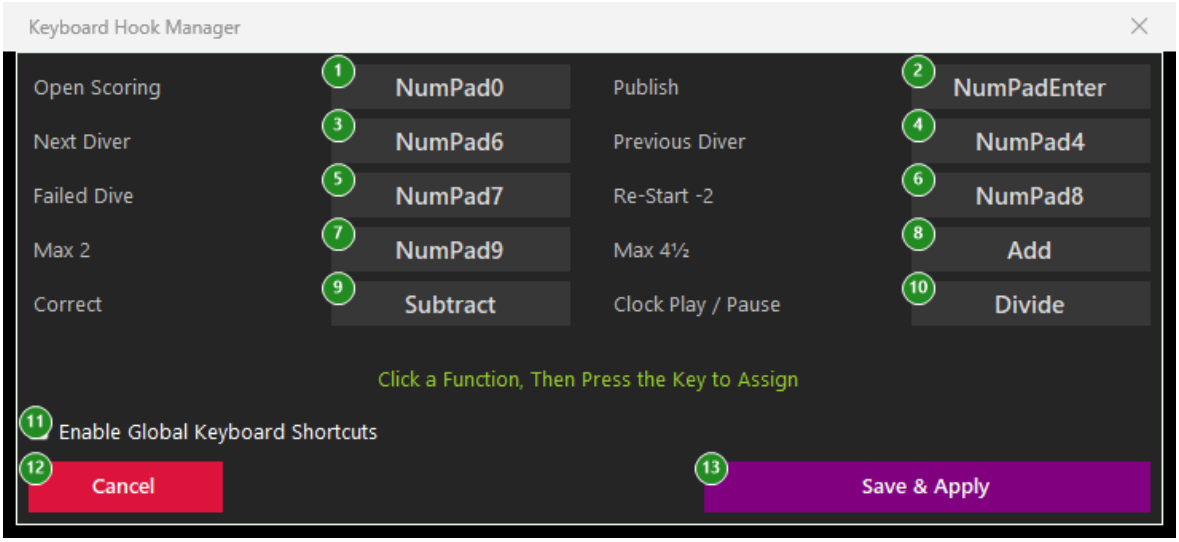



*Figure 46. The Keyboard Hook Manager.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | NumPad0 | **Open Scoring Key** | Shows the key assigned to Open Scoring. Click the box and press the key to assign; a right click clears the assignment. The change takes effect with Save & Apply. |
| 2 | NumPadEnter | **Publish Key** | Shows the key assigned to Publish. Click the box and press the key to assign; a right click clears the assignment. The change takes effect with Save & Apply. |
| 3 | NumPad6 | **Next Diver Key** | Shows the key assigned to Next Diver. Click the box and press the key to assign; a right click clears the assignment. The change takes effect with Save & Apply. |
| 4 | NumPad4 | **Previous Diver Key** | Shows the key assigned to Previous Diver. Click the box and press the key to assign; a right click clears the assignment. The change takes effect with Save & Apply. |
| 5 | NumPad7 | **Failed Dive Key** | Shows the key assigned to Failed Dive. Click the box and press the key to assign; a right click clears the assignment. The change takes effect with Save & Apply. |
| 6 | NumPad8 | **Re-Start -2 Key** | Shows the key assigned to Re-Start -2. Click the box and press the key to assign; a right click clears the assignment. The change takes effect with Save & Apply. |
| 7 | NumPad9 | **Max 2 Key** | Shows the key assigned to Max 2. Click the box and press the key to assign; a right click clears the assignment. The change takes effect with Save & Apply. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 8 | Add | **Max 4½ Key** | Shows the key assigned to Max 4½. Click the box and press the key to assign; a right click clears the assignment. The change takes effect with Save & Apply. |
| 9 | Subtract | **Correct Key** | Shows the key assigned to Correct. Click the box and press the key to assign; a right click clears the assignment. The change takes effect with Save & Apply. |
| 10 | Divide | **Clock Play / Pause Key** | Shows the key assigned to the clock play / pause button. Click the box and press the key to assign; a right click clears the assignment. The change takes effect with Save & Apply. |
| 11 | Enable Global Keyboard Shortcuts | **Enable Global Keyboard Shortcuts** | Turns the shortcuts on or off. When on they work while another window is active; they are ignored while typing in a text box or when Ctrl, Shift or Alt is held. |
| 12 | Cancel | **Cancel** | Closes the window without saving. |
| 13 | Save & Apply | **Save & Apply** | Saves the assigned keys and the global shortcut switch, applies them to the desk and closes the window. |

## Open Design

Opens from the folder icon next to the mode buttons. See chapter 8.

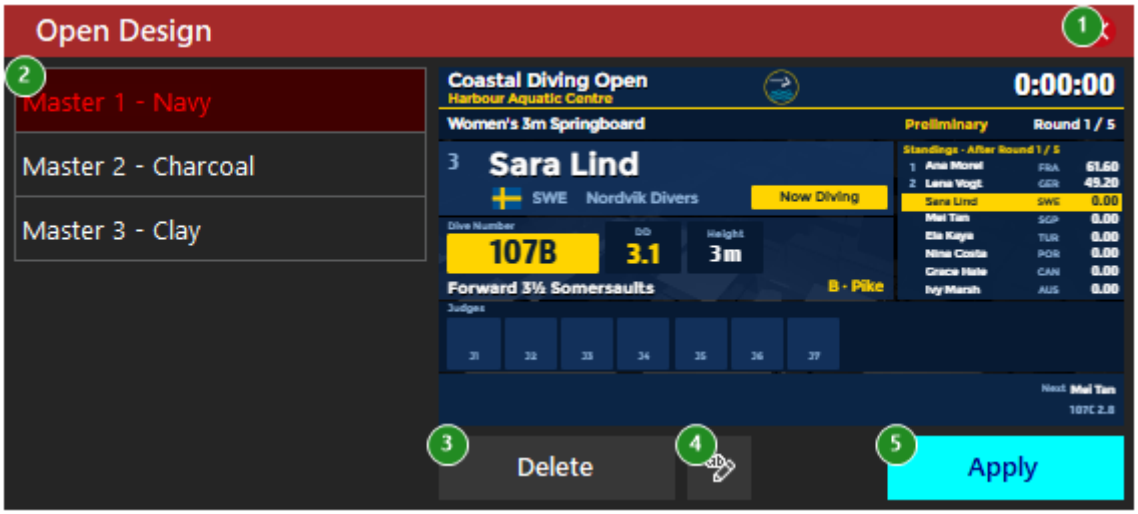



*Figure 47. The design gallery of the active display mode.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | ✕ | **Close** | Closes the list without changing the design. The list also closes when another window is clicked. |
| 2 |  | **Designs** | Lists the designs of the current display mode. Selecting one shows a live preview; the name of a customer design can be edited here. |
| 3 | Delete | **Delete** | After a confirmation, deletes the selected customer design and its files. Factory designs cannot be deleted. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 4 |  | **Rename** | Starts editing the name of the selected customer design. Factory designs cannot be renamed. |
| 5 |   | **Apply** | Makes the selected design the current one for the display mode, rewrites the board with it and closes the list. |

## 20.4 Media Player

The Media Player tab holds the playlists of the board. See chapter 13.

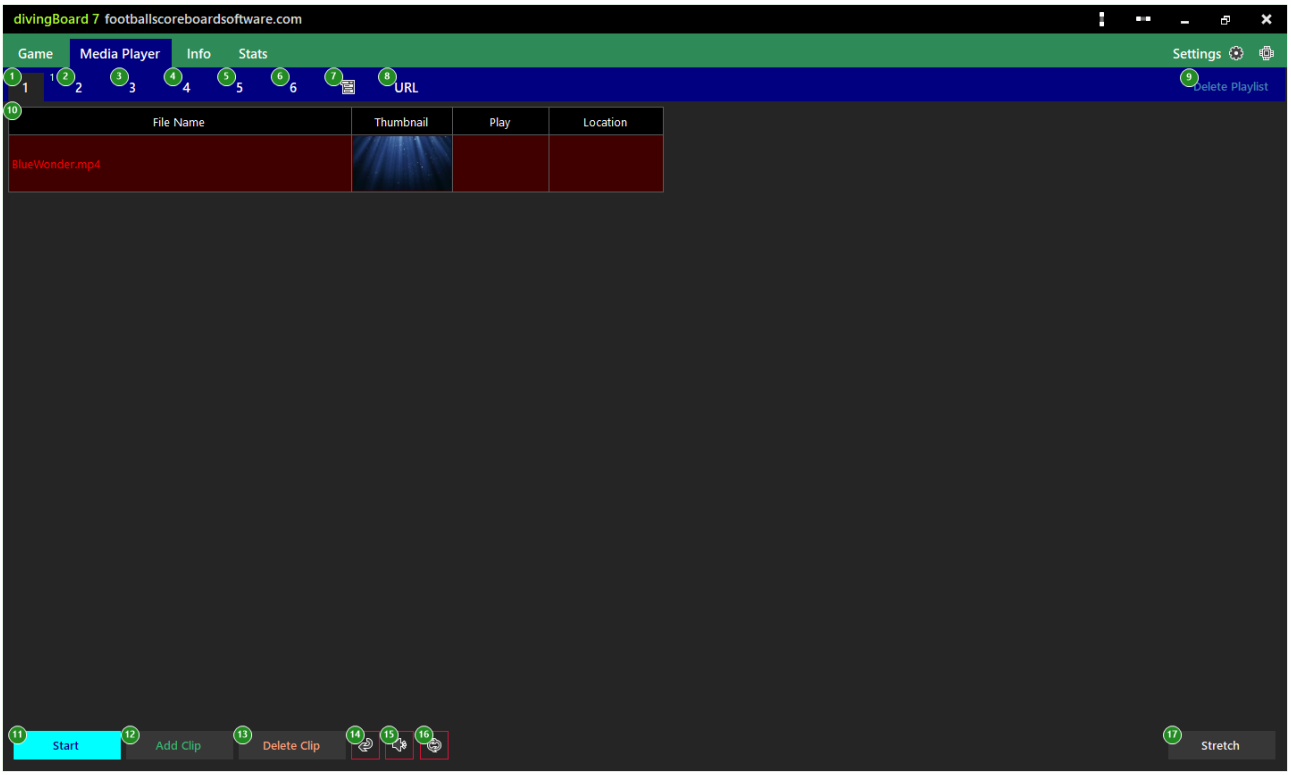
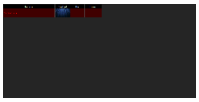
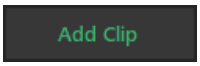
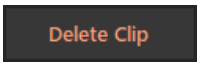



*Figure 48. The Media Player tab.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 |   | **1** | Selects playlist 1 and shows its clips. Locked while a playlist is playing. |
| 2 |   | **2** | Selects playlist 2 and shows its clips. Locked while a playlist is playing. |
| 3 |   | **3** | Selects playlist 3 and shows its clips. Locked while a playlist is playing. |
| 4 |   | **4** | Selects playlist 4 and shows its clips. Locked while a playlist is playing. |
| 5 |   | **5** | Selects playlist 5 and shows its clips. Locked while a playlist is playing. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 6 |  | **6** | Selects playlist 6 and shows its clips. Locked while a playlist is playing. |
| 7 |  | **More Playlists** | Opens a list of playlists 7 to 20 to choose from. Locked while a playlist is playing. |
| 8 |  | **URL** | Opens the web address page, where you play a video from an internet address. |
| 9 |  | **Delete Playlist** | Removes every clip from the selected playlist at once, without asking. The files are not deleted. |
| 10 |  | **Clip List** | The clips of the selected playlist with file name, thumbnail, a play button and the position. Click a row to select the clip to start from and drag rows to change the order. Changes are saved with the playlist. |
| 11 |  | **Start** | Plays the playlist on the main display from the selected clip, clip after clip. The button then reads Finish; pressing it stops the playback. Does nothing if no clip is selected or the file is missing. |
| 12 |  | **Add Clip** | Opens a file dialog and adds the chosen video, picture or audio files to the playlist. Not available while a playlist is playing. |
| 13 |  | **Delete Clip** | Removes the selected clip from the playlist. Not available while a playlist is playing. |
| 14 |  | **Return To Scoreboard** | Switches on (lime frame) or off (red frame) the return to the Game tab and the scoreboard when the last clip of the playlist has ended. |
| 15 |  | **Sound On/Off** | Switches the sound of the clips on (lime frame) or off (red frame). The choice is saved. |
| 16 |  | **Auto Repeat** | Switches repeat on (lime frame) or off (red frame): when the last clip ends the playlist starts again from the first. Starting a playlist sets it to off. |
| 17 |  | **Display Mode** | Chooses how a clip or picture fits the screen: Center, Cover Center, Original, Size To Fit, Size To Fit Center, Stretch or Zoom Center. Applies at once and is saved. |

## 20.5 Info

The Info tab shows the info screens on the board. See chapter 9. The buttons in the Competition Screens group go on the board at once; the buttons with a gear open the fields of a screen.

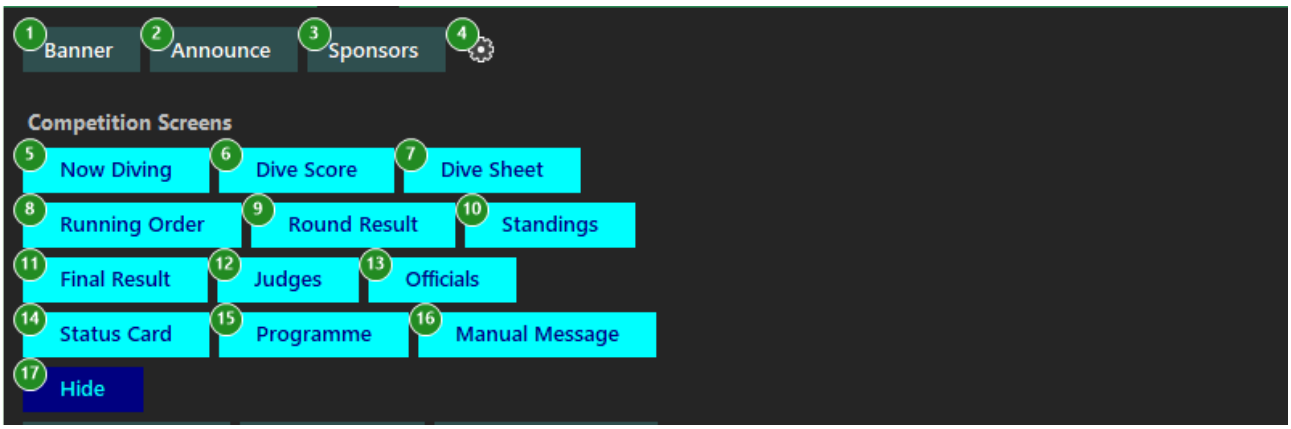



*Figure 49. The Info tab.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | Banner | **Banner** | Opens the Banner editor, a full-screen title page with three text lines and an optional sponsor logo. |
| 2 | Announce | **Announce** | Opens the Announce editor, a full-screen message page with one text and an optional sponsor logo. |
| 3 | Sponsors | **Sponsors** | Opens the sponsor picture list used by the banner, announce and sponsor strip. |
| 4 | | **Background Settings** | Shows or hides the background choices for the info screens: scoreboard background, black, or a selected file. |
| 5 | Now Diving | **Now Diving** | Puts the callout for the diver on the board: name, team, dive number, dive name, position, height, DD, rank and total. It stays empty when no dive is current on the active display at once. The button of the screen on the air has a lime frame; Hide takes it off. |
| 6 | Dive Score | **Dive Score** | Puts the callout with the points of the last published dive: the judges' awards (cancelled ones dimmed), penalty, points, total and rank. It shows nothing until the current dive is published on the active display at once. The button of the screen on the air has a lime frame; Hide takes it off. |
| 7 | Dive Sheet | **Dive Sheet** | Puts the dive sheet of the current diver: each round with dive number, description, DD and points, the current round highlighted on the active display at once. The button of the screen on the air has a lime frame; Hide takes it off. |
| 8 | Running Order | **Running Order** | Puts the running order of the current stage (up to 12 divers, the current diver highlighted) on the active display at once. The button of the screen on the air has a lime frame; Hide takes it off. |
| 9 | Round Result | **Round Result** | Puts the result table of the current round: the best ten published dives with dive, DD and points on the active display at once. The button of the screen on the air has a lime frame; Hide takes it off. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 10 | Standings | **Standings** | Puts the standings table of the stage after the last round, with rank, name, nation, total and the gap to the leader; the number of rows is set in its gear button on the active display at once. The button of the screen on the air has a lime frame; Hide takes it off. |
| 11 | Final Result | **Final Result** | Puts the final result table of the event (the first eight places, medal places highlighted) on the active display at once. The button of the screen on the air has a lime frame; Hide takes it off. |
| 12 | Judges | **Judges** | Puts the list of the referee and the judges with their seats and nations on the active display at once. The button of the screen on the air has a lime frame; Hide takes it off. |
| 13 | Officials | **Officials** | Puts the list of officials typed in its gear button (role, name, country) on the active display at once. The button of the screen on the air has a lime frame; Hide takes it off. |
| 14 | Status Card | **Status Card** | Puts the status card (warm-up, break, protest, equipment check, delay, medal ceremony or custom text), with a count-down if minutes are set in its gear button on the active display at once. The button of the screen on the air has a lime frame; Hide takes it off. |
| 15 | Programme | **Programme** | Puts the programme table typed in its gear button (time, event, round, height) on the active display at once. The button of the screen on the air has a lime frame; Hide takes it off. |
| 16 | Manual Message | **Manual Message** | Puts the manual message typed in its gear button (heading, main line, second line, big value, unit, small line) on the design of the Dive Score callout on the active display at once. The button of the screen on the air has a lime frame; Hide takes it off. |
| 17 | Hide | **Hide** | Takes the info screen off the active display and returns to the scoreboard. |

## Fields of the Info Screens

Each gear button opens a page with the fields of that screen, and a Show and a Hide button.

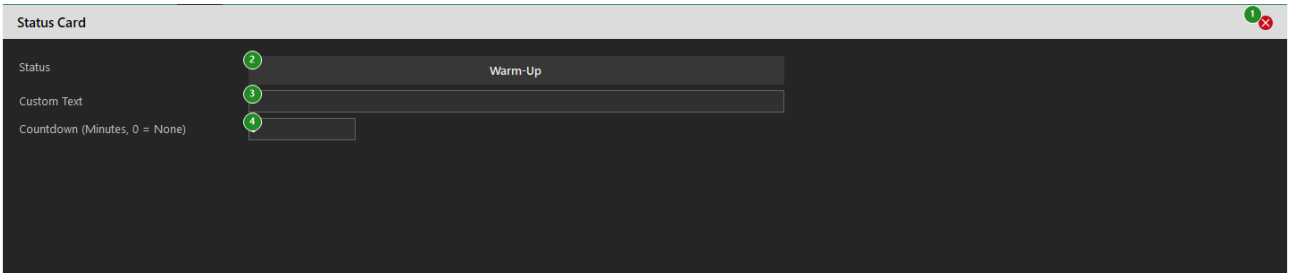



*Figure 50. Status Card: the kind of card, a text of your own and a countdown.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 |  | **Close** | Closes the editor. Esc does the same; every change is already saved. |
| 2 |  | **Status Type** | Chooses the status shown on the card: Warm-Up, Break, Protest, Equipment Check, Delay, Medal Ceremony or Custom. Saved at once. |
| 3 |  | **Text Field 1** | A text or number field of the screen being edited (the number of rows of Standings, custom text and count-down minutes of Status Card, the heading of Programme, or a line of Manual Message). Each change is saved at once with the competition; a number field ignores entries that are not whole numbers. |
| 4 |  | **Text Field 2** | A text or number field of the screen being edited (the number of rows of Standings, custom text and count-down minutes of Status Card, the heading of Programme, or a line of Manual Message). Each change is saved at once with the competition; a number field ignores entries that are not whole numbers. |

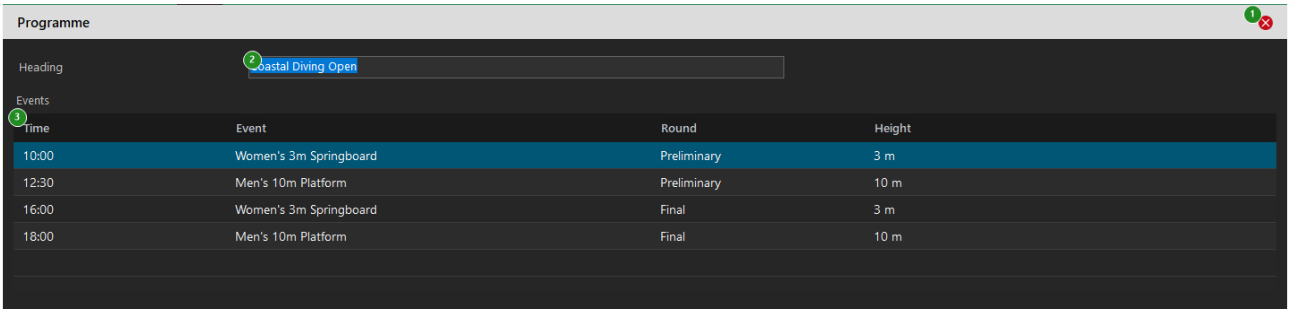
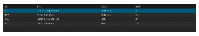



*Figure 51. Programme: the heading and the events of the day.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 |  | **Close** | Closes the editor. Esc does the same; every change is already saved. |
| 2 |  | **Text Field 1** | A text or number field of the screen being edited (the number of rows of Standings, custom text and count-down minutes of Status Card, the heading of Programme, or a line of Manual Message). Each change is saved at once with the competition; a number field ignores entries that are not whole numbers. |
| 3 |  | **Programme Rows** | The programme lines with time, event, round and height. Type in the last empty row to add one; select a row and press Delete to remove it. Changes are saved after each edit. |

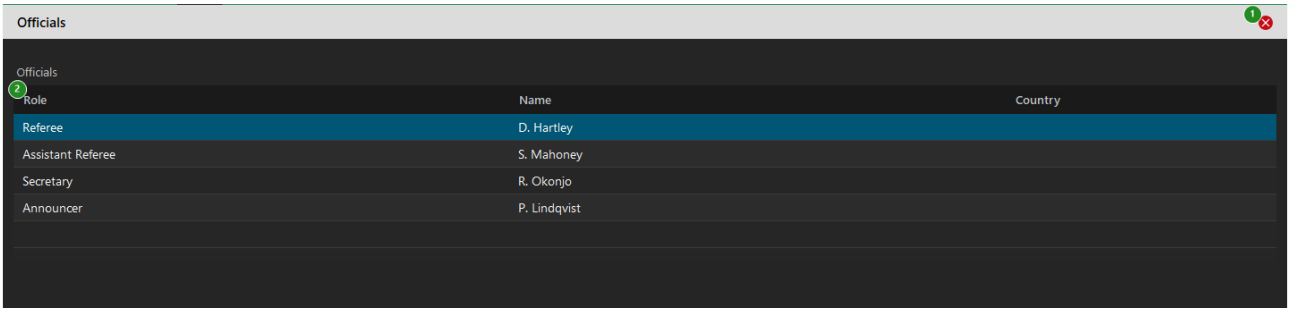
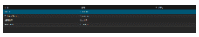



*Figure 52. Officials: role, name and country.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 |  | **Close** | Closes the editor. Esc does the same; every change is already saved. |
| 2 |  | **Officials List** | The officials with role, name and country. Type in the last empty row to add one; select a row and press Delete to remove it. Changes are saved after each edit. |

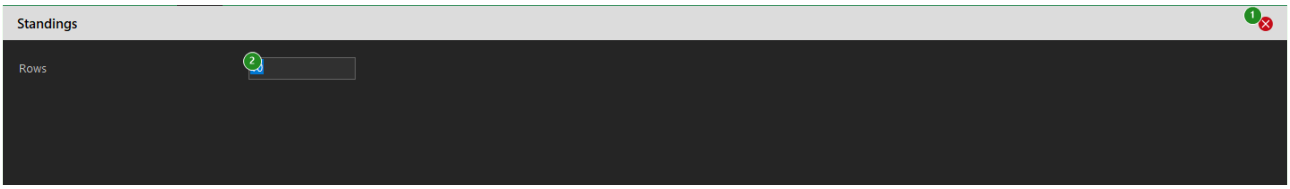



*Figure 53. Standings: how many rows the screen shows.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 |  | **Close** | Closes the editor. Esc does the same; every change is already saved. |
| 2 |  | **Text Field 1** | A text or number field of the screen being edited (the number of rows of Standings, custom text and count-down minutes of Status Card, the heading of Programme, or a line of Manual Message). Each change is saved at once with the competition; a number field ignores entries that are not whole numbers. |

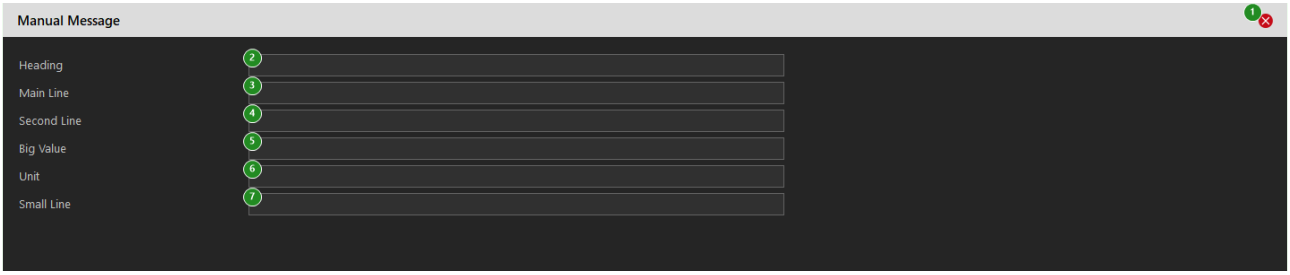



*Figure 54. Manual Message: the same text as in the Manual Entry window.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 |  | **Close** | Closes the editor. Esc does the same; every change is already saved. |
| 2 | | **Text Field 1** | A text or number field of the screen being edited (the number of rows of Standings, custom text and count-down minutes of Status Card, the heading of Programme, or a line of Manual Message). Each change is saved at once with the competition; a number field ignores entries that are not whole numbers. |
| 3 | | **Text Field 2** | A text or number field of the screen being edited (the number of rows of Standings, custom text and count-down minutes of Status Card, the heading of Programme, or a line of Manual Message). Each change is saved at once with the competition; a number field ignores entries that are not whole numbers. |
| 4 | | **Text Field 3** | A text or number field of the screen being edited (the number of rows of Standings, custom text and count-down minutes of Status Card, the heading of Programme, or a line of Manual Message). Each change is saved at once with the competition; a number field ignores entries that are not whole numbers. |
| 5 | | **Text Field 4** | A text or number field of the screen being edited (the number of rows of Standings, custom text and count-down minutes of Status Card, the heading of Programme, or a line of Manual Message). Each change is saved at once with the competition; a number field ignores entries that are not whole numbers. |
| 6 | | **Text Field 5** | A text or number field of the screen being edited (the number of rows of Standings, custom text and count-down minutes of Status Card, the heading of Programme, or a line of Manual Message). Each change is saved at once with the competition; a number field ignores entries that are not whole numbers. |
| 7 | | **Text Field 6** | A text or number field of the screen being edited (the number of rows of Standings, custom text and count-down minutes of Status Card, the heading of Programme, or a line of Manual Message). Each change is saved at once with the competition; a number field ignores entries that are not whole numbers. |

## Banner

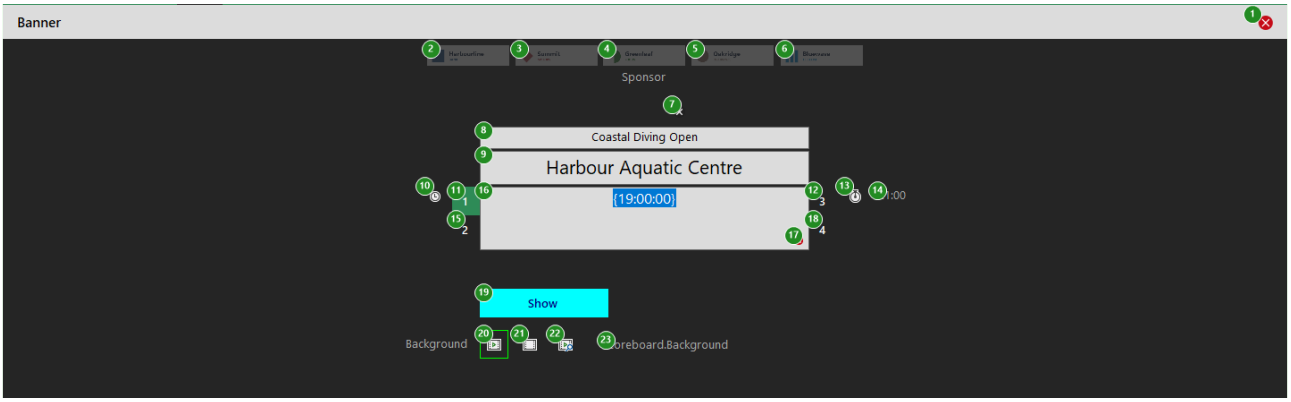
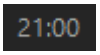



*Figure 55. The Banner page: a scrolling or static strip over the board.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 |  | **Close** | Closes the editor and returns to the Info page. Esc does the same. |
| 2 |  | **Sponsor 1** | Click to use sponsor logo 1 of the sponsor list on the page; the chosen logo is shown in full colour, the others faded. The choice is saved. |
| 3 |  | **Sponsor 2** | Click to use sponsor logo 2 of the sponsor list on the page; the chosen logo is shown in full colour, the others faded. The choice is saved. |
| 4 |  | **Sponsor 3** | Click to use sponsor logo 3 of the sponsor list on the page; the chosen logo is shown in full colour, the others faded. The choice is saved. |
| 5 |  | **Sponsor 4** | Click to use sponsor logo 4 of the sponsor list on the page; the chosen logo is shown in full colour, the others faded. The choice is saved. |
| 6 |  | **Sponsor 5** | Click to use sponsor logo 5 of the sponsor list on the page; the chosen logo is shown in full colour, the others faded. The choice is saved. |
| 7 |  | **Clear Sponsor Logo** | Removes the sponsor logo from the page and clears the saved logo choice. |
| 8 |  | **First Line** | The first text line of the banner (for example the event name). Saved when you press Show. |
| 9 |  | **Second Line** | The second text line of the banner (for example the venue). Saved when you press Show. |
| 10 |  | **Show Clock** | Puts the clock marker {00:00} in the third line; pressing it again switches to the version with seconds. |
| 11 |  | **1** | Loads stored text 1 for the third line. The text of the tab you leave is not saved unless you pressed Show; the first and second line are the same on every tab. |
| 12 |  | **3** | Loads stored text 3 for the third line. The text of the tab you leave is not saved unless you pressed Show; the first and second line are the same on every tab. |
| 13 |  | **Show Remaining Time** | Puts the remaining-time marker for the time in the box beside it into the third line; pressing it again switches to the version with seconds. |
| 14 |  | **Target Time** | The time of day (HH:MM) the remaining-time marker counts down to. A value that is not a valid time is replaced by 23:59 when you leave the box. |
| 15 |  | **2** | Loads stored text 2 for the third line. The text of the tab you leave is not saved unless you pressed Show; the first and second line are the same on every tab. |
| 16 |  | **Third Line** | The third text line of the current tab. A time in braces such as {19:00} shows the time remaining to that time and {00:00} shows the clock. Saved for the tab when you press Show. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 17 | | **Clear Text** | Empties the text box and puts the cursor back in it. Visible only while the box has the focus. |
| 18 | 4 | **4** | Loads stored text 4 for the third line. The text of the tab you leave is not saved unless you pressed Show; the first and second line are the same on every tab. |
| 19 | Show | **Show** | Saves the three lines and shows the banner on the active display. |
| 20 | | **Scoreboard Background** | Uses the scoreboard background behind the page. The choice is saved at once. |
| 21 | | **Black Background** | Uses a plain black background behind the page. The choice is saved at once. |
| 22 | | **Selected Background** | Uses the picture or video file chosen with the file button behind the page; black is used if no file is chosen. The choice is saved at once. |
| 23 | Scoreboard.Background | **Background File** | Shows which background is in use, or the name of the chosen background file. Display only. |

## Announce

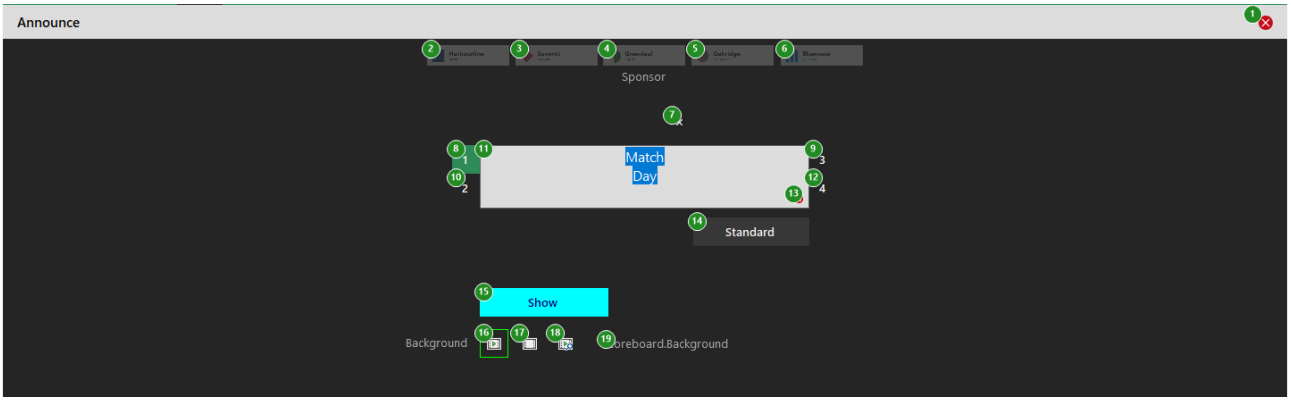
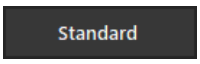
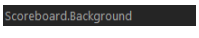



*Figure 56. The Announce page: a message box on the board.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | | **Close** | Closes the editor and returns to the Info page. Esc does the same. |
| 2 | | **Sponsor 1** | Click to use sponsor logo 1 of the sponsor list on the page; the chosen logo is shown in full colour, the others faded. The choice is saved. |
| 3 | | **Sponsor 2** | Click to use sponsor logo 2 of the sponsor list on the page; the chosen logo is shown in full colour, the others faded. The choice is saved. |
| 4 | | **Sponsor 3** | Click to use sponsor logo 3 of the sponsor list on the page; the chosen logo is shown in full colour, the others faded. The choice is saved. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 5 |  | **Sponsor 4** | Click to use sponsor logo 4 of the sponsor list on the page; the chosen logo is shown in full colour, the others faded. The choice is saved. |
| 6 |  | **Sponsor 5** | Click to use sponsor logo 5 of the sponsor list on the page; the chosen logo is shown in full colour, the others faded. The choice is saved. |
| 7 |  | **Clear Sponsor Logo** | Removes the sponsor logo from the page and clears the saved logo choice. |
| 8 |  | **1** | Loads stored text 1 into the text box. The text of the tab you leave is not saved unless you pressed Show. |
| 9 |  | **3** | Loads stored text 3 into the text box. The text of the tab you leave is not saved unless you pressed Show. |
| 10 |  | **2** | Loads stored text 2 into the text box. The text of the tab you leave is not saved unless you pressed Show. |
| 11 |  | **Announcement Text** | The text of the announcement, several lines allowed. A time in braces such as {19:00} shows the time remaining. Saved for the current tab when you press Show. |
| 12 |  | **4** | Loads stored text 4 into the text box. The text of the tab you leave is not saved unless you pressed Show. |
| 13 |  | **Clear Text** | Empties the text box and puts the cursor back in it. Visible only while the box has the focus. |
| 14 |   | **Text Style** | Chooses how the announcement text is drawn: Standard, Gradient, Shape, Stripe-H, Stripe-V or Stroke. Applies at once and is saved; a settings button appears for every style except Standard. |
| 15 |   | **Show** | Saves the text and shows the announcement on the active display. |
| 16 |  | **Scoreboard Background** | Uses the scoreboard background behind the page. The choice is saved at once. |
| 17 |  | **Black Background** | Uses a plain black background behind the page. The choice is saved at once. |
| 18 |  | **Selected Background** | Uses the picture or video file chosen with the file button behind the page; black is used if no file is chosen. The choice is saved at once. |
| 19 |   | **Background File** | Shows which background is in use, or the name of the chosen background file. Display only. |

## Sponsors

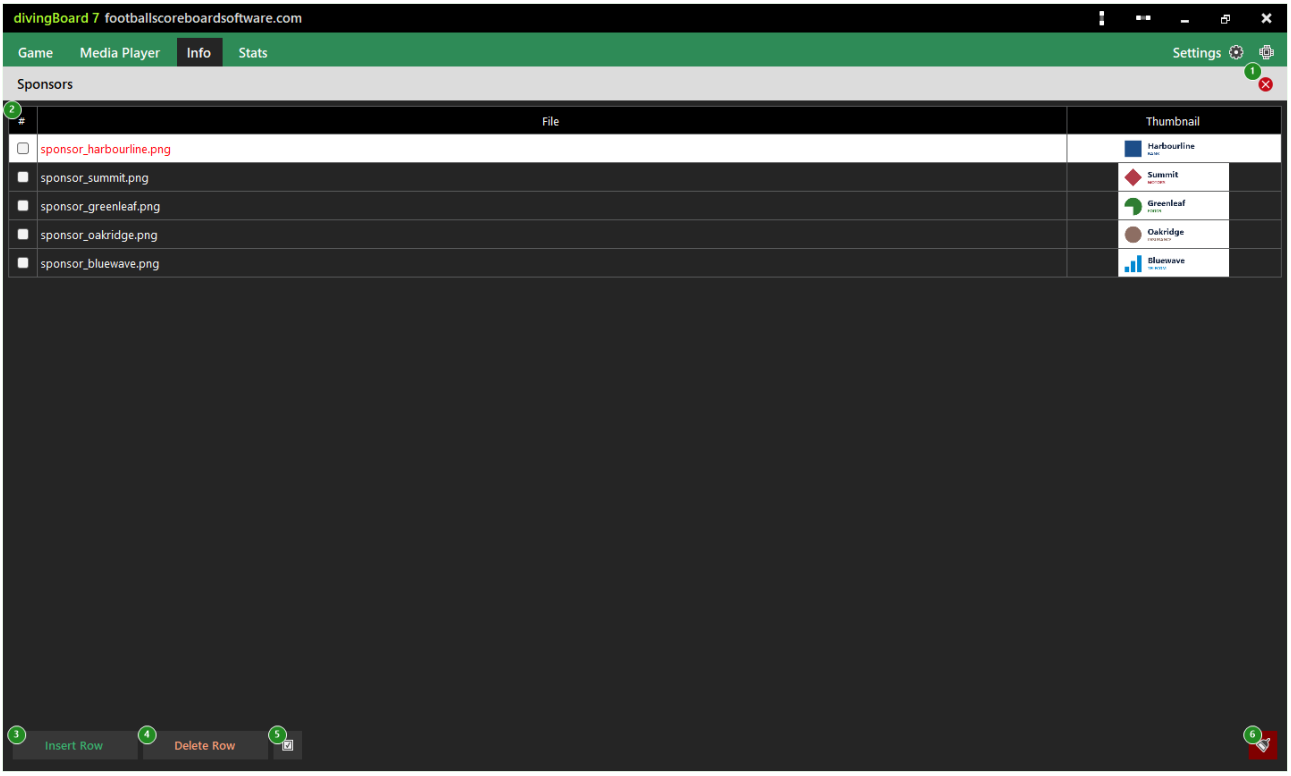
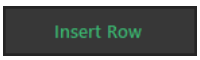
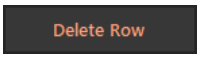



*Figure 57. The Sponsors page: the logos of the Sponsored board.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 |  | **Close** | Closes the sponsor list. Esc does the same. |
| 2 |  | **Sponsor List** | The sponsor pictures with a default mark, file name and thumbnail. Drag a row to change the order. Every change is saved at once. |
| 3 |  | **Insert Row** | Opens a file dialog and adds the chosen pictures (one or several) to the end of the list. |
| 4 |  | **Delete Row** | Removes the selected picture from the list. The file is not deleted. |
| 5 |  | **Set Default** | Marks the selected picture as the default sponsor logo and moves it to the top; pressing it on the default picture removes the mark. The default is the logo the banner and announce pages start with. |
| 6 |  | **Clear All** | Removes every picture from the list at once, without asking. The picture files themselves are not deleted. |

# 20.6 Stats

The Stats tab lists the points of every dive of a stage. See chapter 11.

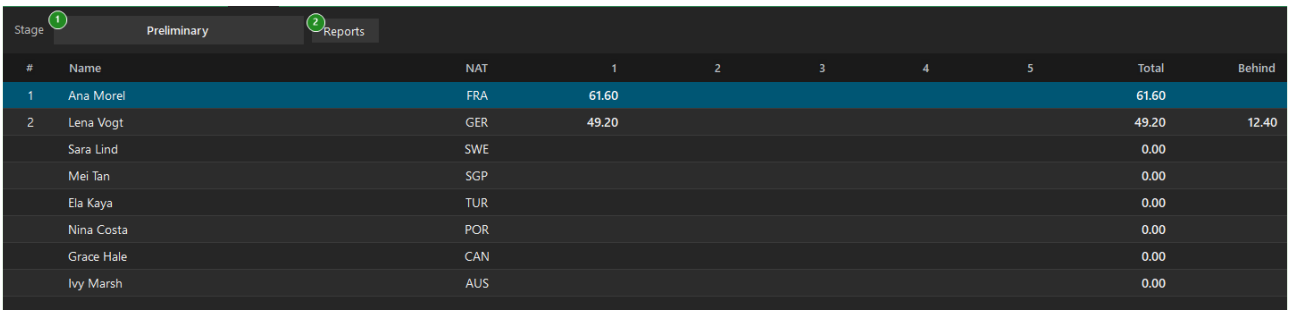



*Figure 58. The Stats tab.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | Preliminary | **Stage** | Opens the list of stages; the table shows the chosen stage. |
| 2 | Reports | **Reports** | Opens the report viewer for printing or saving results. |

## 20.7 Settings

The Settings tab has a list of pages at its left.

### License

The key and the computer ID are hidden in this picture. See chapter 3.

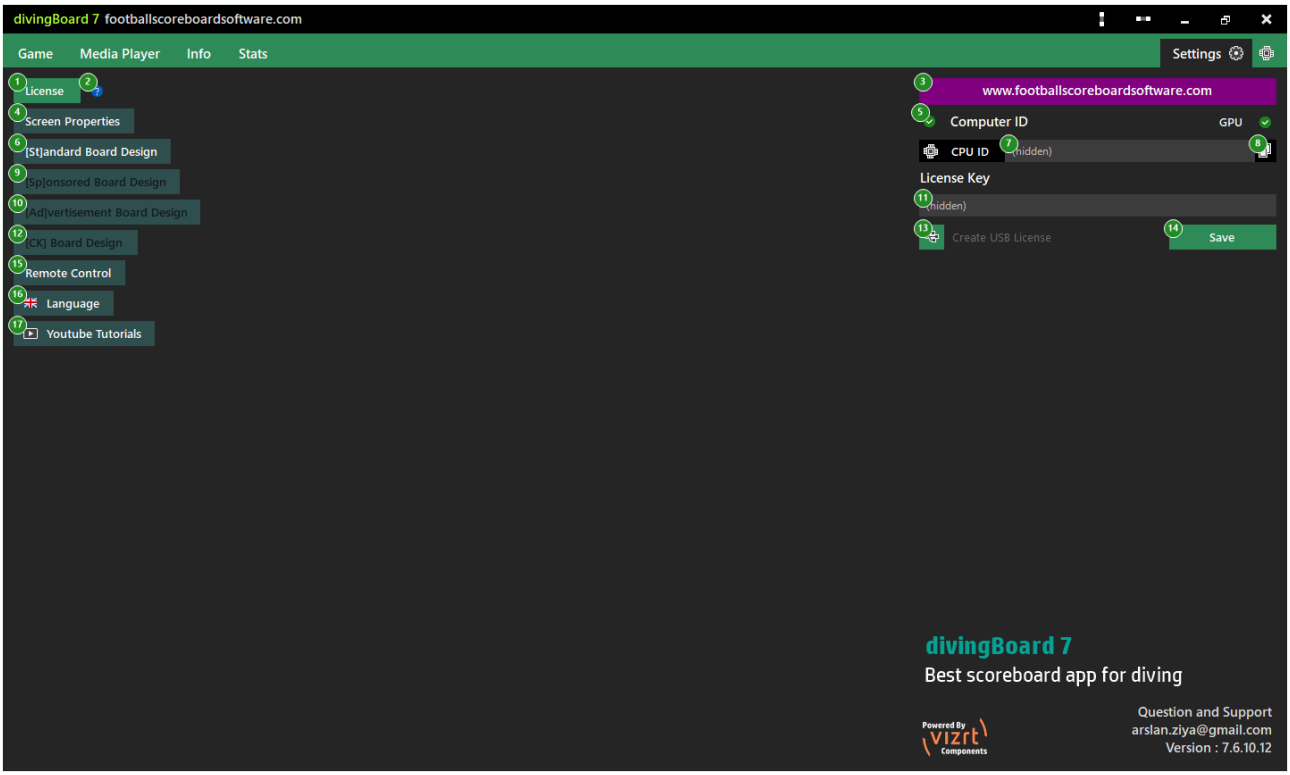
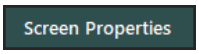
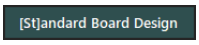
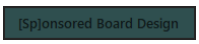
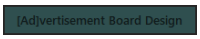
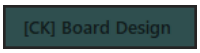
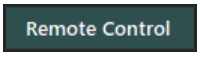
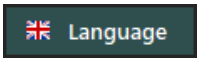
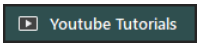



*Figure 59. The License page.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | License | **License** | Shows the License page with the computer ID and the license key. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 2 |  | **License Info** | Shows a message with the licence state: validity, maximum resolution, expiry date, model, GPU, extra player and record and replay options. The message uses an information icon for a valid licence and an error icon otherwise. |
| 3 |  | **Website Link** | Opens the product web site in the default web browser. |
| 4 |  | **Screen Properties** | Shows the Screen Properties grid with the board window position and size and other display settings. |
| 5 |  | **License Help** | Opens a help page about the computer (CPU) license. The icon shows a green tick when the entered key is valid for this computer. |
| 6 |  | **[St]andard Board Design** | Opens the design editor for the standard board. It is enabled only while the standard display mode is active. |
| 7 |  | **Computer ID** | Shows the ID of this computer, which the license key is issued for. It can be selected and copied. |
| 8 |  | **Copy Computer ID** | Copies the computer ID to the clipboard so it can be sent when ordering a license. |
| 9 |  | **[Sp]onsored Board Design** | Opens the design editor for the sponsored board. It is enabled only while the sponsored display mode is active. |
| 10 |  | **[Ad]vertisement Board Design** | Opens the design editor for the advertisement board. It is enabled only while the advertisement display mode is active. |
| 11 |  | **License Key** | Holds the license key; clicking the box selects all text so a key can be pasted over it. The box turns green when the key fits this computer, and the key is stored only when Save is pressed. |
| 12 |  | **[CK] Board Design** | Opens the design editor for the chroma key board. It is enabled only while the chroma key display mode is active. |
| 13 |  | **Create USB License** | Opens the USB License page, where a license key is written to a USB stick. |
| 14 |  | **Save** | Checks the license key against this computer and the diving product. A valid key is saved to the license file and a success message is shown; an invalid key shows a warning and the previously saved key returns. |
| 15 |  | **Remote Control** | Opens the Remote Control page with the phone address, QR code and PIN. |
| 16 |  | **Language** | Opens the Language page, where the program language and the texts can be changed. |
| 17 |  | **Youtube Tutorials** | Opens the YouTube tutorial playlist in the default web browser. |

## USB License Creator




*Figure 60. The USB License Creator.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | | **USB License Help** | Opens a help page about USB licenses. |
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## Screen Properties




*Figure 61. The Screen Properties page.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | License | **License** | Shows the License page with the computer ID and the license key. |
| 2 | ? | **License Info** | Shows a message with the licence state: validity, maximum resolution, expiry date, model, GPU, extra player and record and replay options. The message uses an information icon for a valid licence and an error icon otherwise. |
| 3 | Screen Properties | **Screen Properties** | Shows the Screen Properties grid with the board window position and size and other display settings. |
| 4 | [St]andard Board Design | **[St]andard Board Design** | Opens the design editor for the standard board. It is enabled only while the standard display mode is active. |
| 5 | [Sp]onsored Board Design | **[Sp]onsored Board Design** | Opens the design editor for the sponsored board. It is enabled only while the sponsored display mode is active. |
| 6 | [Ad]vertisement Board Design | **[Ad]vertisement Board Design** | Opens the design editor for the advertisement board. It is enabled only while the advertisement display mode is active. |
| 7 | [CK] Board Design | **[CK] Board Design** | Opens the design editor for the chroma key board. It is enabled only while the chroma key display mode is active. |
| 8 | Remote Control | **Remote Control** | Opens the Remote Control page with the phone address, QR code and PIN. |
| 9 | Language | **Language** | Opens the Language page, where the program language and the texts can be changed. |
| 10 | Youtube Tutorials | **Youtube Tutorials** | Opens the YouTube tutorial playlist in the default web browser. |

## Board Design

The four design pages ([St]andard, [Sp]onsored, [Ad]vertisement and [CK]) work the same way; the picture shows the Standard page. See chapter 8.

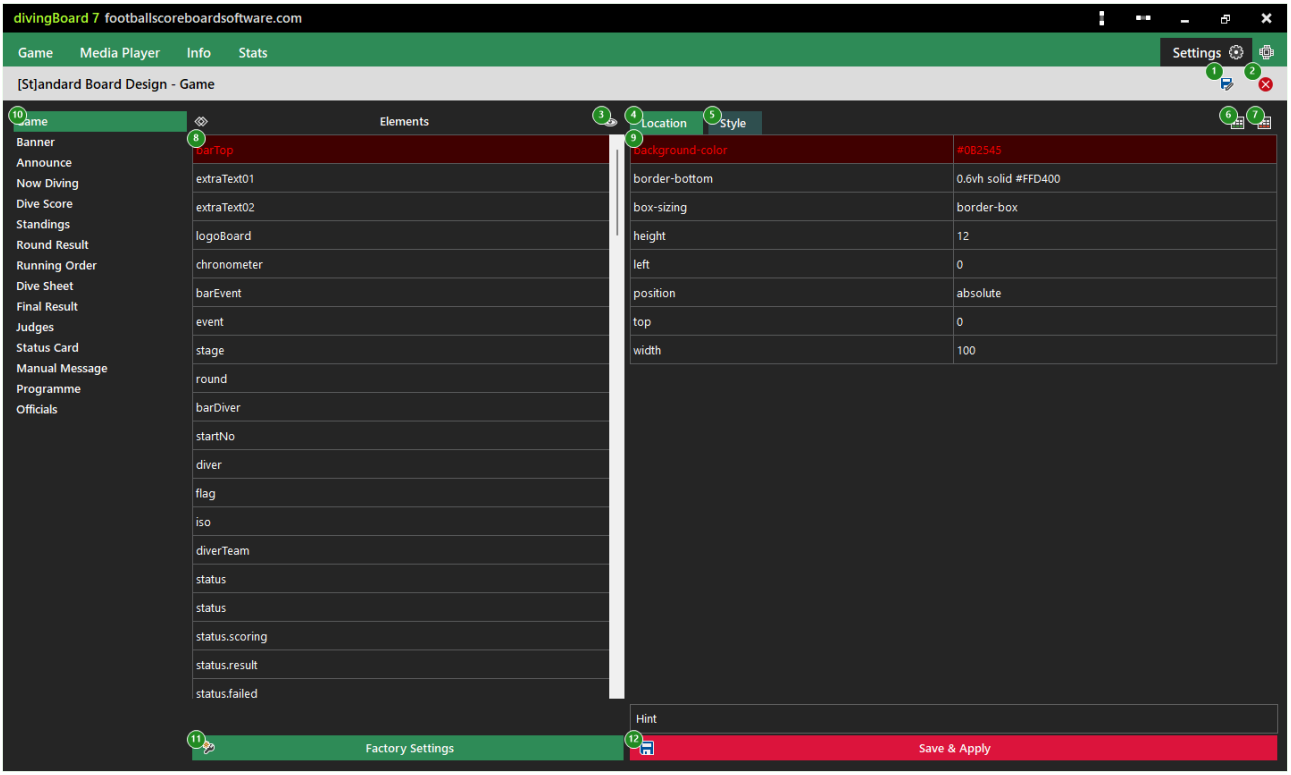
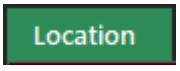
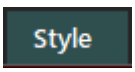
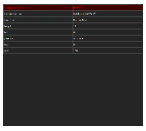



*Figure 62. The design editor.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 |  | **Save Design As** | Asks for a name and saves the current Game design as a new design in the design list. It is not available for the CK design, where a message says so. |
| 2 |  | **Close** | Closes the design editor and returns to the Settings tab. Esc does the same. |
| 3 |  | **Show or Hide** | Switches the selected element between hidden and visible by setting its display property to none or back to a visible value in the property table. The change is stored and shown on the board only after Save & Apply. |
| 4 |  | **Location** | Shows the position and size properties of the selected element in the property table. This is the page shown when the editor opens. |
| 5 |  | **Style** | Shows the style properties of the selected element (colours, fonts and similar) in the property table. |
| 6 |  | **Insert Row** | Adds an empty row to the property table so a new property and value can be typed or picked. The row is stored only after Save & Apply. |
| 7 |  | **Delete Row** | Removes the selected row from the property table. The change is stored only after Save & Apply. |
| 8 |  | **Elements** | Lists the elements of the selected screen; hidden elements are shown in grey. Selecting an element loads its properties and outlines it on the board preview. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 9 |  | **Properties** | Lists the properties and values of the selected element for the chosen page (Location or Style). A property name can be picked from a list and a value typed or picked; nothing is stored until Save & Apply. |
| 10 |  | **Screen Types** | Lists the screens whose design can be edited: Game, Banner, Announce (not in the CK design) and the information screens. Selecting a row loads the elements of that screen into the Elements list. |
| 11 |  | **Factory Settings** | Asks for confirmation, then replaces the design of the selected screen with its factory version and reloads the element list. Edits to that screen are lost. |
| 12 |  | **Save & Apply** | Writes the property rows of the selected element into the design file, rebuilds the style sheet and refreshes the board with the new look. For the Game screen the current design is saved as well. |

## Remote Control

See chapter 14.

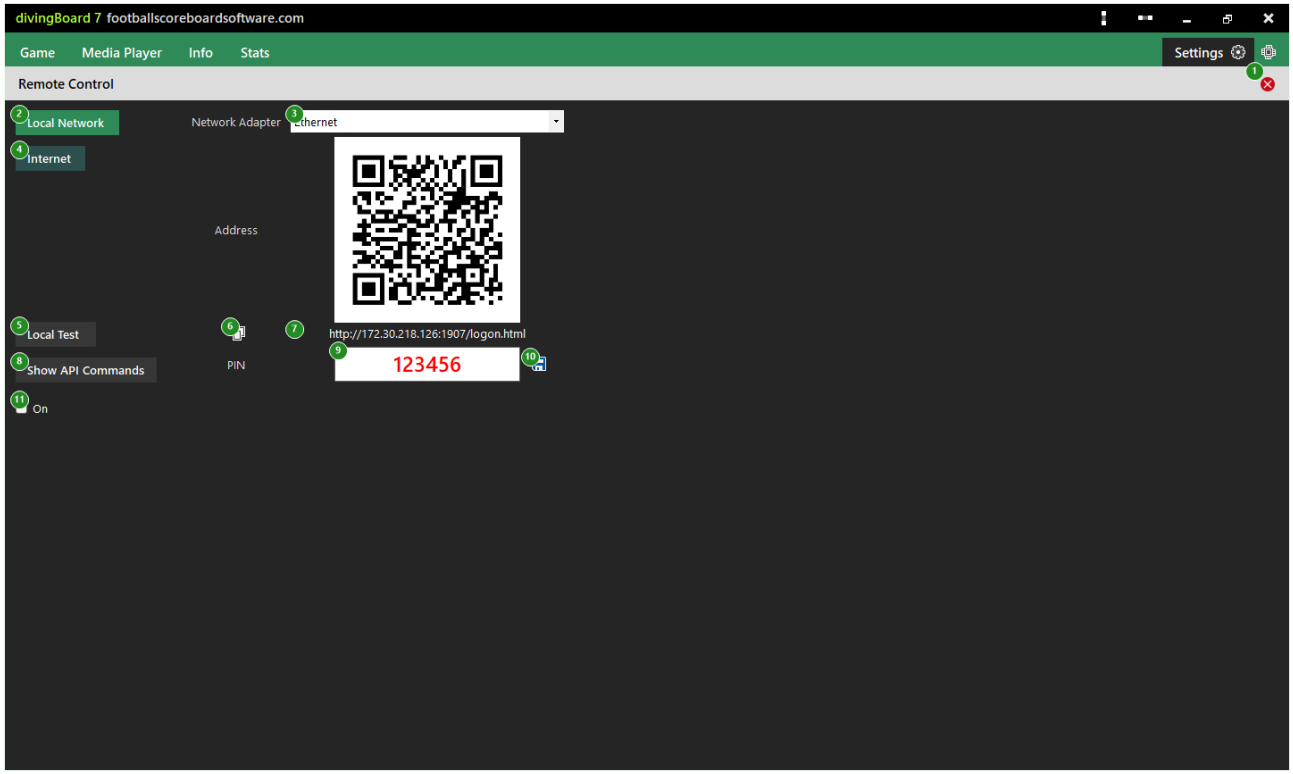
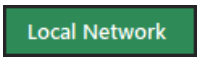
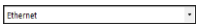
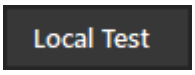
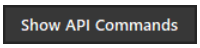
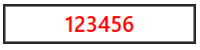



*Figure 63. The Remote Control page.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 |  | **Close** | Closes the remote control page and returns to the Settings tab. Esc does the same. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 2 |   | **Local Network** | Shows the address and QR code for devices on the same network, using the chosen network adapter. |
| 3 |   | **Network Adapter** | Lists the active Ethernet and wireless adapters with an IPv4 address; choosing one puts its address and QR code in the link box. |
| 4 |   | **Internet** | Looks up the public internet address of this computer and shows it as the link and QR code, or shows No Internet Connection if the lookup fails. |
| 5 |   | **Local Test** | Opens the address in the link box in the default web browser to test the remote control on this computer. |
| 6 |  | **Copy Link** | Copies the address in the link box to the clipboard. |
| 7 |   | **Remote Address** | Shows the address of the remote control page for the selected network adapter or for the internet address. The text can be selected and copied. |
| 8 |   | **Show API Commands** | Opens the list of API commands (API_Commands.txt) in Notepad. |
| 9 |   | **PIN** | The operator PIN requested by the remote control login page; it accepts digits only and the default is 123456. A changed PIN is used only after it is saved. |
| 10 |  | **Save PIN** | Stores the typed PIN as the operator PIN of the remote control and hides itself. It appears only after the PIN text is changed. |
| 11 |  | **Remote Control On/Off** | Starts or stops the remote control server on port 1907 and stores the choice. If the port cannot be opened a message is shown and the switch returns to off. |

## Language

See chapter 17.

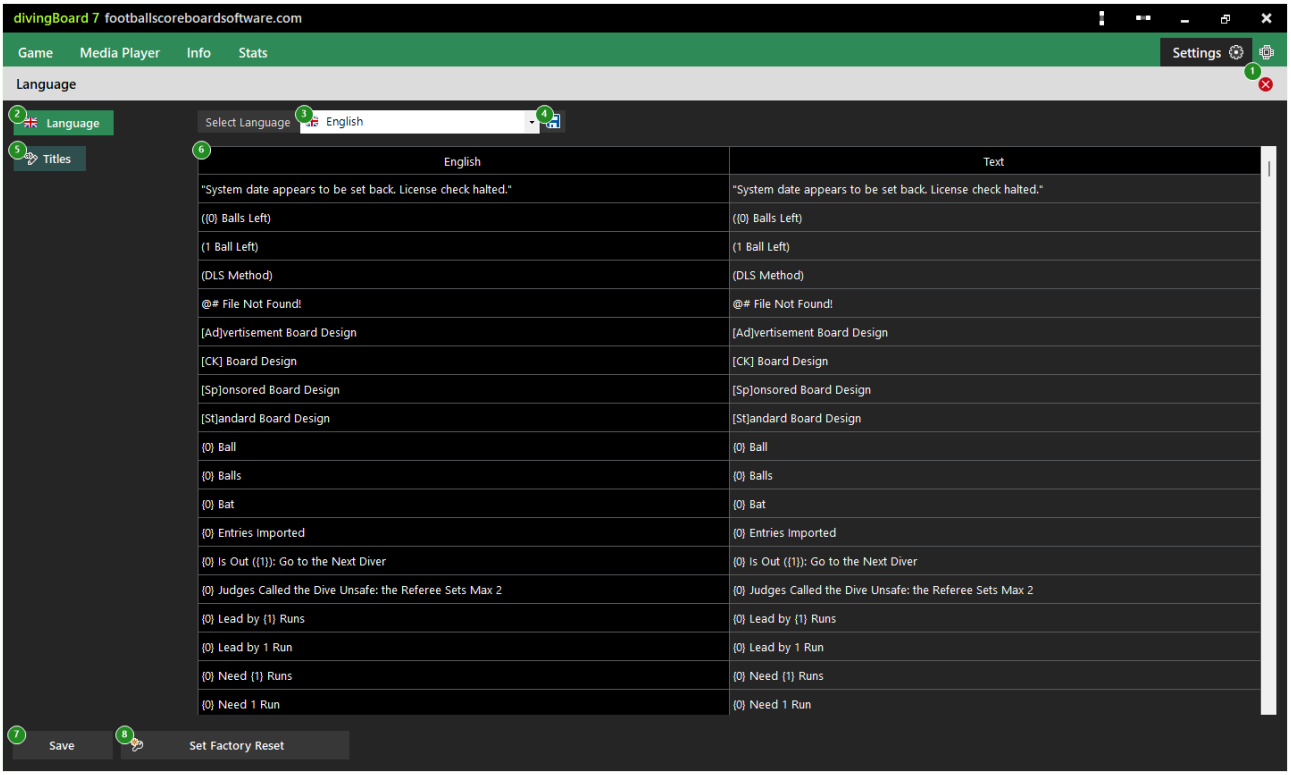
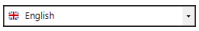
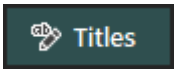
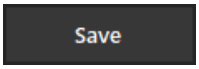
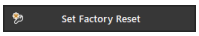



*Figure 64. The Language page.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 |  | **Close** | Closes the language page and returns to the Settings tab. Esc does the same. |
| 2 |  | **Language** | Shows the table of interface texts, with the English text on the left and the text of the selected language on the right. |
| 3 |  | **Language List** | Selects the language whose texts are shown in the table; each entry shows a flag and the language name. Choosing one reloads the table. |
| 4 |  | **Use This Language** | Stores the language selected in the list as the language of the program and shows a message asking to restart the application. The new language is used after the restart. |
| 5 |  | **Titles** | Shows the table of titles used on the screens, taken from the title file, so they can be edited. |
| 6 |  | **Translation Table** | Lists each text with its English original (read only) and the translation of the selected language, which can be edited with F2 or by typing. Edited rows are stored when Save is pressed. |
| 7 |  | **Save** | Stores the edited rows of the table: translations in the language file, or titles in the title file. The button turns green when there are unsaved changes. |
| 8 |  | **Set Factory Reset** | On the Language page, replaces the whole language file with the factory file and reloads the table, so all edited texts are lost. On the Titles page, resets the titles to the texts of the current language. There is no confirmation. |

## 20.8 Sponsored Mode

Appears as a tab when the display mode is Sp. See chapter 7.

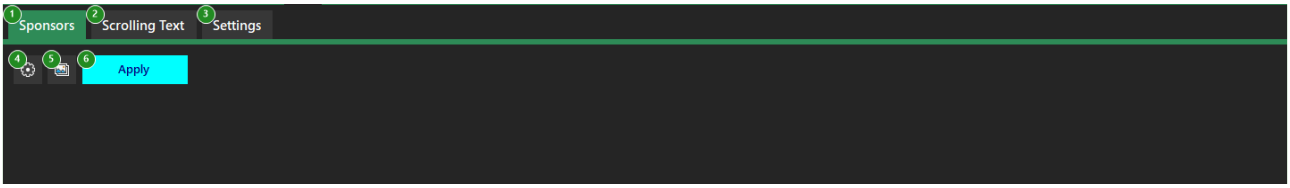



*Figure 65. Sponsors page of the Sp tab.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | Sponsors | **Sponsors** | Shows the tab with the scrolling sponsor pictures. |
| 2 | Scrolling Text | **Scrolling Text** | Shows the tab with the scrolling text. |
| 3 | Settings | **Settings** | Shows the tab for the place and height of the sponsor strip. |
| 4 | | **Picture Style** | Shows or hides the style settings of the sponsor pictures: height, spacing, position, speed and direction. |
| 5 | | **Sponsor Pictures** | Opens the sponsor picture list to add, remove and reorder pictures. |
| 6 | Apply | **Apply** | Shows the sponsor pictures as a scrolling strip in the sponsor area, using the style settings, and remembers it as the start page. |

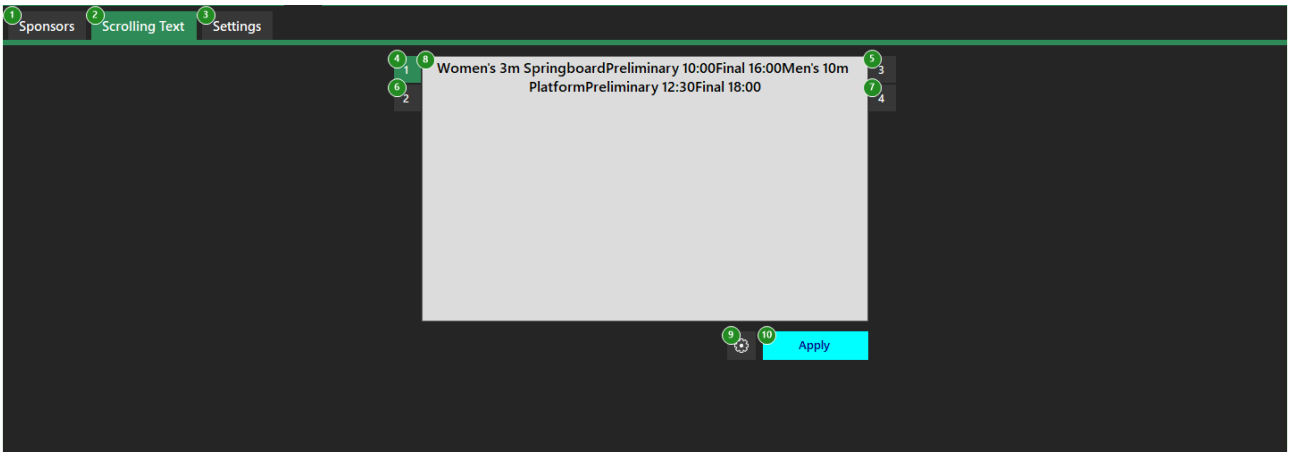
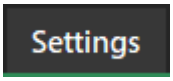



*Figure 66. Scrolling Text page.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | Sponsors | **Sponsors** | Shows the tab with the scrolling sponsor pictures. |
| 2 | Scrolling Text | **Scrolling Text** | Shows the tab with the scrolling text. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 3 |  | **Settings** | Shows the tab for the place and height of the sponsor strip. |
| 4 |  | **1** | Loads stored scrolling text 1 into the text box. |
| 5 |  | **3** | Loads stored scrolling text 3 into the text box. |
| 6 |  | **2** | Loads stored scrolling text 2 into the text box. |
| 7 |  | **4** | Loads stored scrolling text 4 into the text box. |
| 8 |  | **Scrolling Text** | The scrolling text; each line is one item and lines alternate in two colours. Saved in the chosen slot when you press Apply. |
| 9 |  | **Text Style** | Shows or hides the style settings of the scrolling text: font, size, colours, speed and direction. |
| 10 |  | **Apply** | Saves the text and shows it as scrolling text in the sponsor area, using the style settings, and remembers it as the start page. |

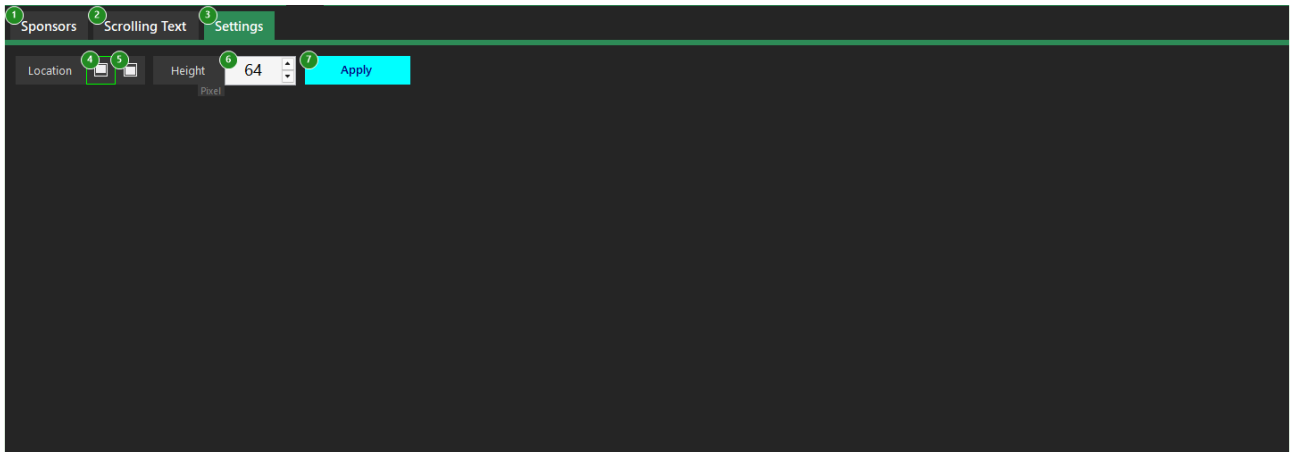
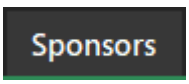
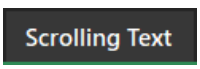
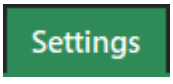



*Figure 67. Settings page.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 |  | **Sponsors** | Shows the tab with the scrolling sponsor pictures. |
| 2 |  | **Scrolling Text** | Shows the tab with the scrolling text. |
| 3 |  | **Settings** | Shows the tab for the place and height of the sponsor strip. |
| 4 |  | **Bottom** | Chooses the bottom of the screen for the sponsor strip (lime frame = chosen). Takes effect with Apply. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 5 |  | **Top** | Chooses the top of the screen for the sponsor strip (lime frame = chosen). Takes effect with Apply. |
| 6 |  | **Height** | Height of the sponsor strip in pixels, 0 to 1920. Takes effect with Apply. |
| 7 |  | **Apply** | Saves the place and height of the sponsor strip and resizes the boards. |

## 20.9 Advertisement Mode

Appears as a tab when the display mode is Ad. See chapter 7.

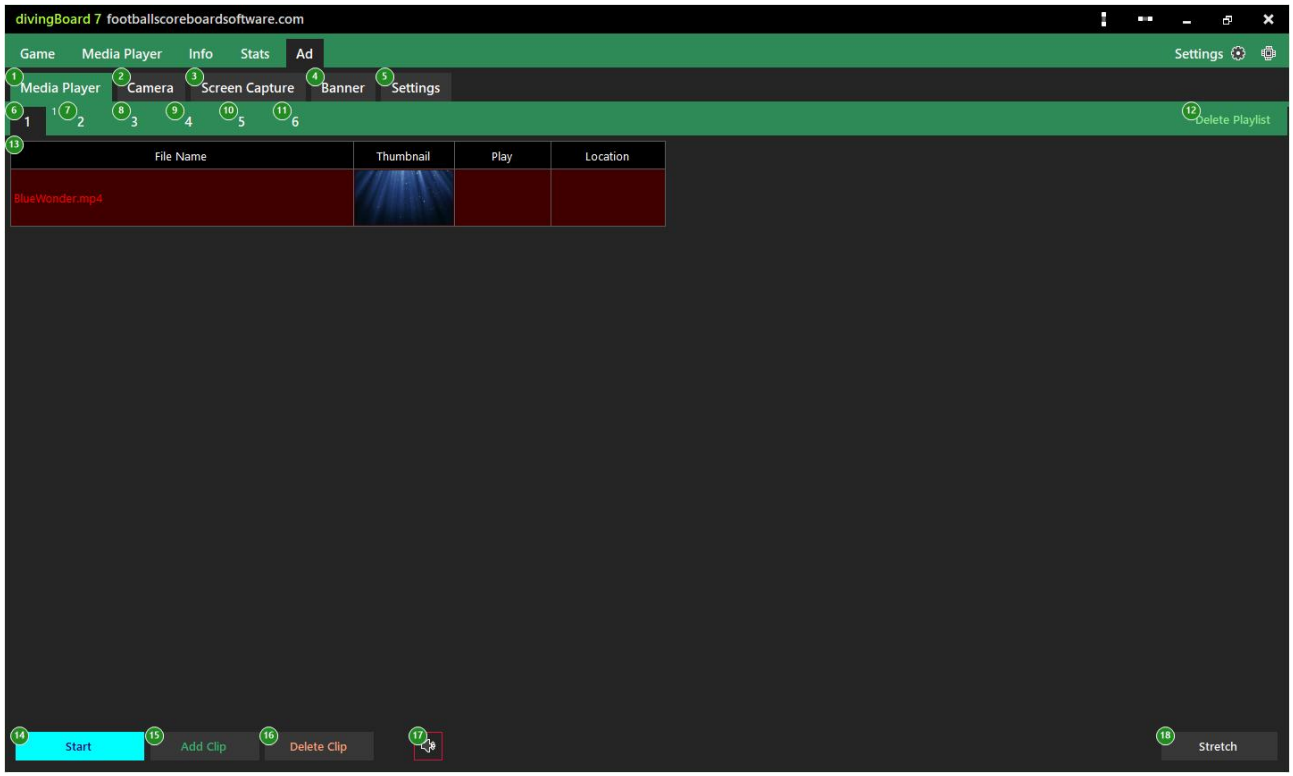
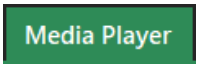
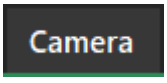
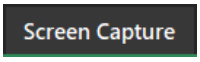
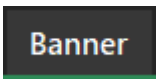
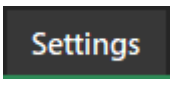
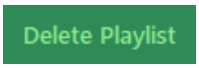
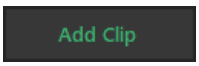
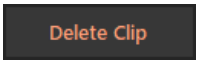



*Figure 68. Media Player page of the Ad tab.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 |  | **Media Player** | Opens the playlist page for the Ad screen. |
| 2 |  | **Camera** | Opens the camera and NDI page for the Ad screen. |
| 3 |  | **Screen Capture** | Opens the screen capture page for the Ad screen. |
| 4 |  | **Banner** | Opens the editors of the two banner strips of the Ad screen. |
| 5 |  | **Settings** | Opens the layout settings of the Ad screen: side and size of the scoreboard and the two banners, and the display mode. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 6 |  | **1** | Selects playlist 1 and shows its clips. Locked while a playlist is playing. |
| 7 |  | **2** | Selects playlist 2 and shows its clips. Locked while a playlist is playing. |
| 8 |  | **3** | Selects playlist 3 and shows its clips. Locked while a playlist is playing. |
| 9 |  | **4** | Selects playlist 4 and shows its clips. Locked while a playlist is playing. |
| 10 |  | **5** | Selects playlist 5 and shows its clips. Locked while a playlist is playing. |
| 11 |  | **6** | Selects playlist 6 and shows its clips. Locked while a playlist is playing. |
| 12 |  | **Delete Playlist** | Removes every clip from the selected playlist at once, without asking. The files are not deleted. |
| 13 |  | **Clip List** | The clips of the selected playlist with file name, thumbnail, a play button and the position. Click a row to select the clip to start from and drag rows to change the order. Changes are saved with the playlist. |
| 14 |  | **Start** | Stops any camera or screen capture and plays the playlist on the Ad screen from the selected clip. The button then reads Finish; pressing it stops the playback. |
| 15 |  | **Add Clip** | Opens a file dialog and adds the chosen video, picture or audio files to the playlist. Not available while a playlist is playing. |
| 16 |  | **Delete Clip** | Removes the selected clip from the playlist. Not available while a playlist is playing. |
| 17 |  | **Sound On/Off** | Switches the sound of the clips on (lime frame) or off (red frame). The choice is saved. |
| 18 |  | **Display Mode** | Chooses how a clip or picture fits the screen: Center, Cover Center, Original, Size To Fit, Size To Fit Center, Stretch or Zoom Center. Applies at once and is saved. |

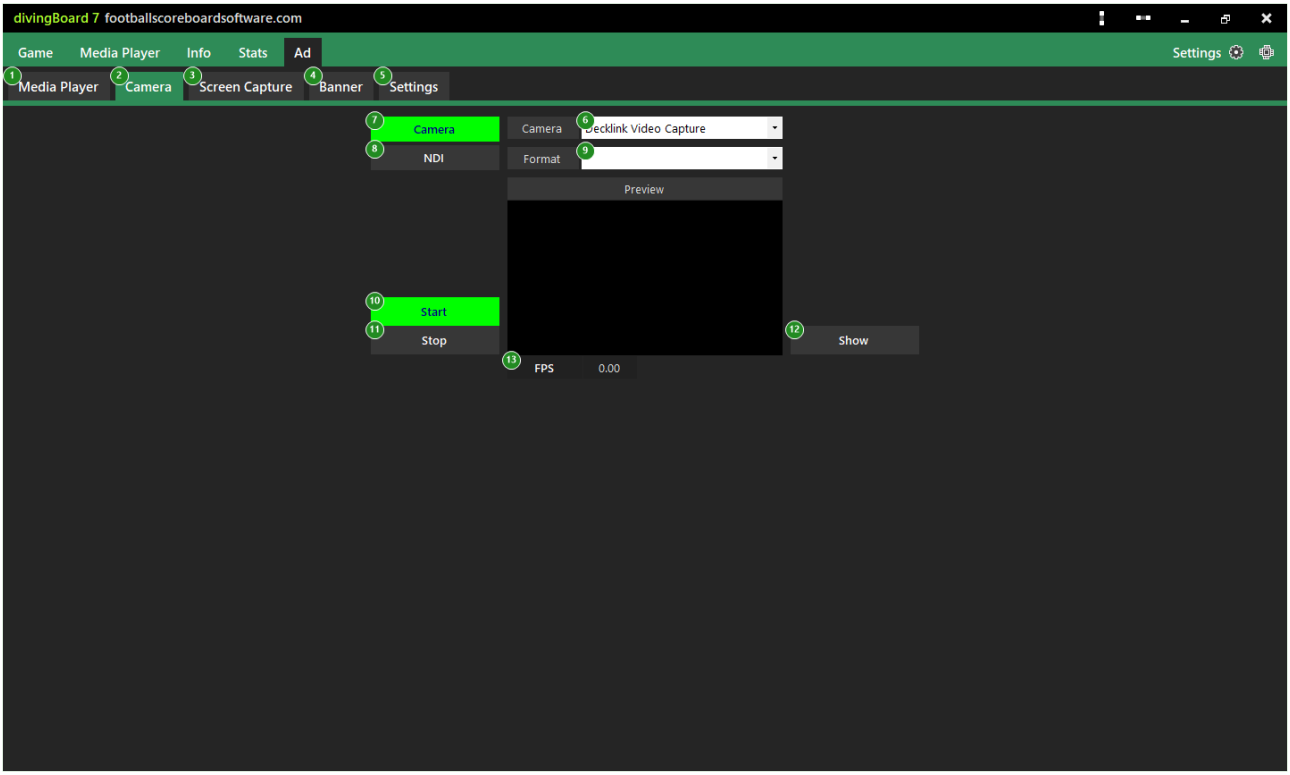



*Figure 69. Camera page.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | Media Player | **Media Player** | Opens the playlist page for the Ad screen. |
| 2 | Camera | **Camera** | Opens the camera and NDI page for the Ad screen. |
| 3 | Screen Capture | **Screen Capture** | Opens the screen capture page for the Ad screen. |
| 4 | Banner | **Banner** | Opens the editors of the two banner strips of the Ad screen. |
| 5 | Settings | **Settings** | Opens the layout settings of the Ad screen: side and size of the scoreboard and the two banners, and the display mode. |
| 6 | Decklink Video Capture | **Camera Device** | Lists the video devices of the computer. Choosing one loads its formats. |
| 7 | Camera | **Camera** | Selects a camera or capture card as the source and shows its camera list. |
| 8 | NDI | **NDI** | Selects an NDI network video source and shows its source list. |
| 9 | | **Format** | Lists the resolutions and frame rates of the chosen camera; the chosen one is used on Start. |
| 10 | Start | **Start** | Starts the selected camera or NDI source in the preview only. A warning appears if no camera and format (or no valid NDI source) is selected. |
| 11 | Stop | **Stop** | Stops the running camera or NDI source and clears the preview and the Ad screen. Available while a source is running. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 12 | Show | **Show** | Puts the running camera or NDI source on the Ad screen, replacing a screen capture or clip. Available while a source is running. |
| 13 | FPS | **FPS** | Updates the figure beside it with the current frames per second of the running source. |

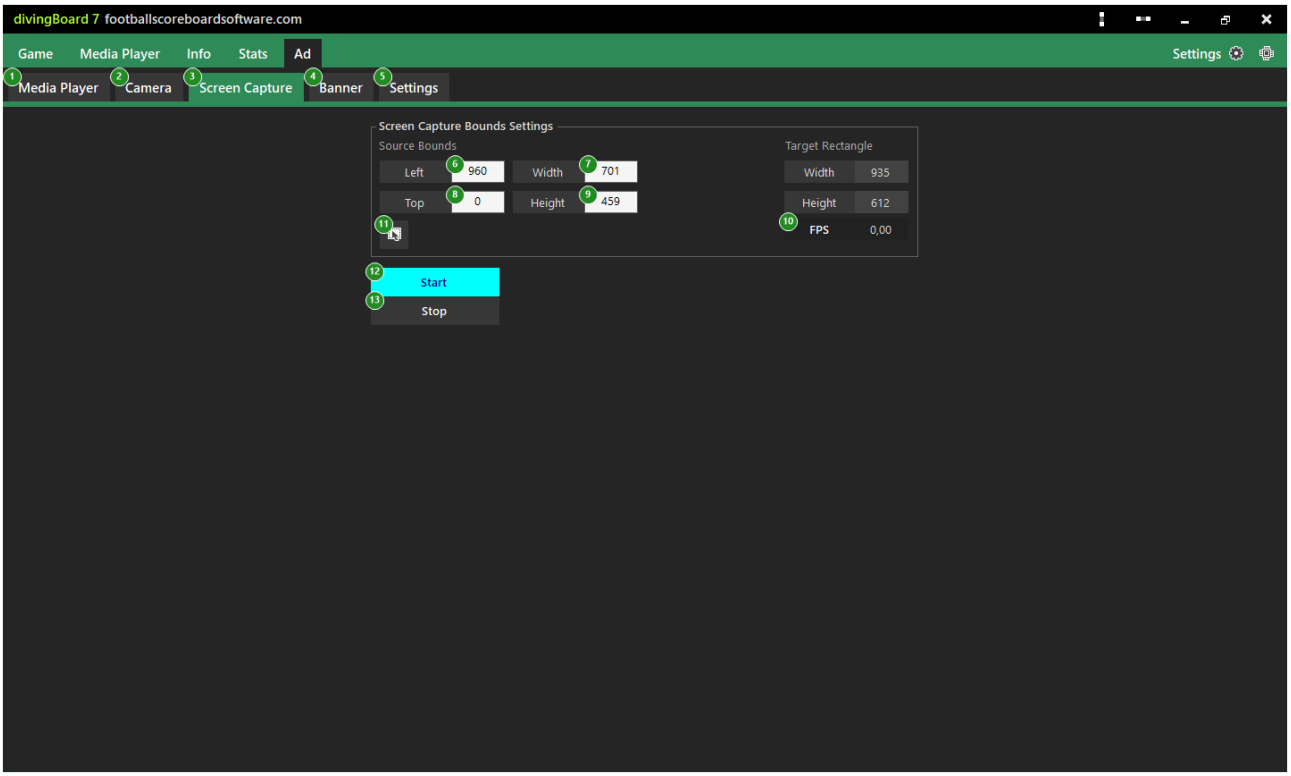



*Figure 70. Screen Capture page.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | Media Player | **Media Player** | Opens the playlist page for the Ad screen. |
| 2 | Camera | **Camera** | Opens the camera and NDI page for the Ad screen. |
| 3 | Screen Capture | **Screen Capture** | Opens the screen capture page for the Ad screen. |
| 4 | Banner | **Banner** | Opens the editors of the two banner strips of the Ad screen. |
| 5 | Settings | **Settings** | Opens the layout settings of the Ad screen: side and size of the scoreboard and the two banners, and the display mode. |
| 6 | 960 | **Source Left** | Distance in pixels from the left edge of the screen to the area to capture. |
| 7 | 701 | **Source Width** | Width in pixels of the screen area to capture. Text that is not a number is turned into a number when you leave the box. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 8 | 0 | **Source Top** | Distance in pixels from the top edge of the screen to the area to capture. |
| 9 | 459 | **Source Height** | Height in pixels of the screen area to capture. Text that is not a number is turned into a number when you leave the box. |
| 10 | FPS | **FPS** | Updates the figure beside it with the current frames per second of the capture. |
| 11 | | **Select Rectangle** | Darkens the screen so you can drag the area to capture; the area fills the four source boxes. Areas that are almost empty are ignored. |
| 12 | Start | **Start** | Saves the area and starts capturing it onto the Ad screen, replacing a camera or clip. The area is rejected with a notice if it is not valid. |
| 13 | Stop | **Stop** | Stops the capture and clears the picture from the Ad screen. Available while a capture is running. |

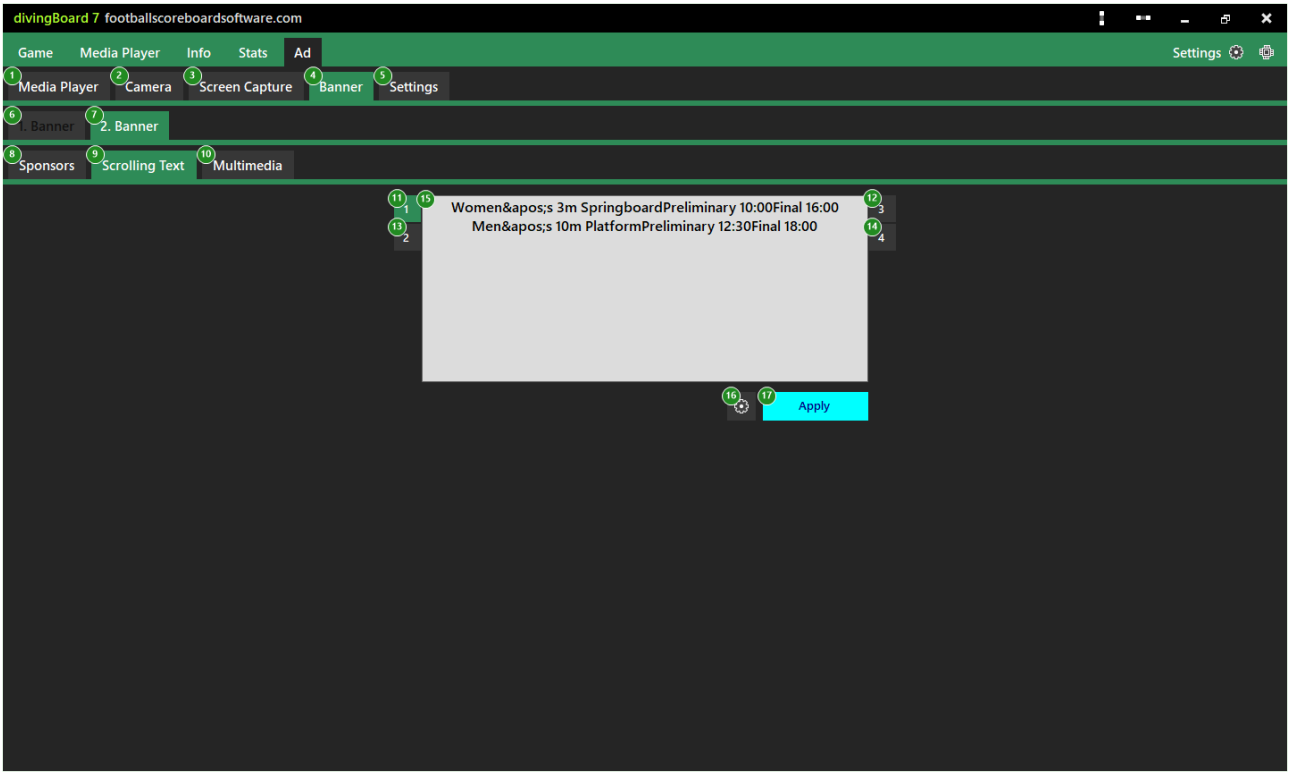
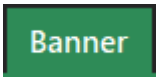
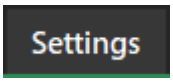
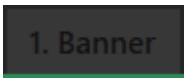
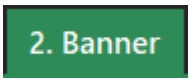
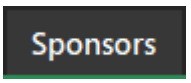
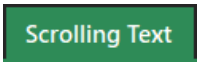
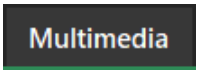
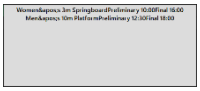



*Figure 71. Banner page.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | Media Player | **Media Player** | Opens the playlist page for the Ad screen. |
| 2 | Camera | **Camera** | Opens the camera and NDI page for the Ad screen. |
| 3 | Screen Capture | **Screen Capture** | Opens the screen capture page for the Ad screen. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 4 |  | **Banner** | Opens the editors of the two banner strips of the Ad screen. |
| 5 |  | **Settings** | Opens the layout settings of the Ad screen: side and size of the scoreboard and the two banners, and the display mode. |
| 6 |  | **1. Banner** | Shows the editor of banner 1. Greyed out when banner 1 has size 0 or is not visible in the settings. |
| 7 |  | **2. Banner** | Shows the editor of banner 2. Greyed out when banner 2 has size 0 or is not visible in the settings. |
| 8 |  | **Sponsors** | Shows the sponsor picture tab of this banner. |
| 9 |  | **Scrolling Text** | Shows the scrolling text tab of this banner. |
| 10 |  | **Multimedia** | Shows the clip playlist tab of this banner. |
| 11 |  | **1** | Loads stored scrolling text 1 into the text box. |
| 12 |  | **3** | Loads stored scrolling text 3 into the text box. |
| 13 |  | **2** | Loads stored scrolling text 2 into the text box. |
| 14 |  | **4** | Loads stored scrolling text 4 into the text box. |
| 15 |  | **Scrolling Text** | The scrolling text of the banner; each line is one item and lines alternate in two colours. Saved in the chosen slot when you press Apply. |
| 16 |  | **Text Style** | Shows or hides the style settings of the scrolling text: font, size, colours, speed and direction. |
| 17 |  | **Apply** | Saves the text and shows it as scrolling text in this banner, using the style settings. |

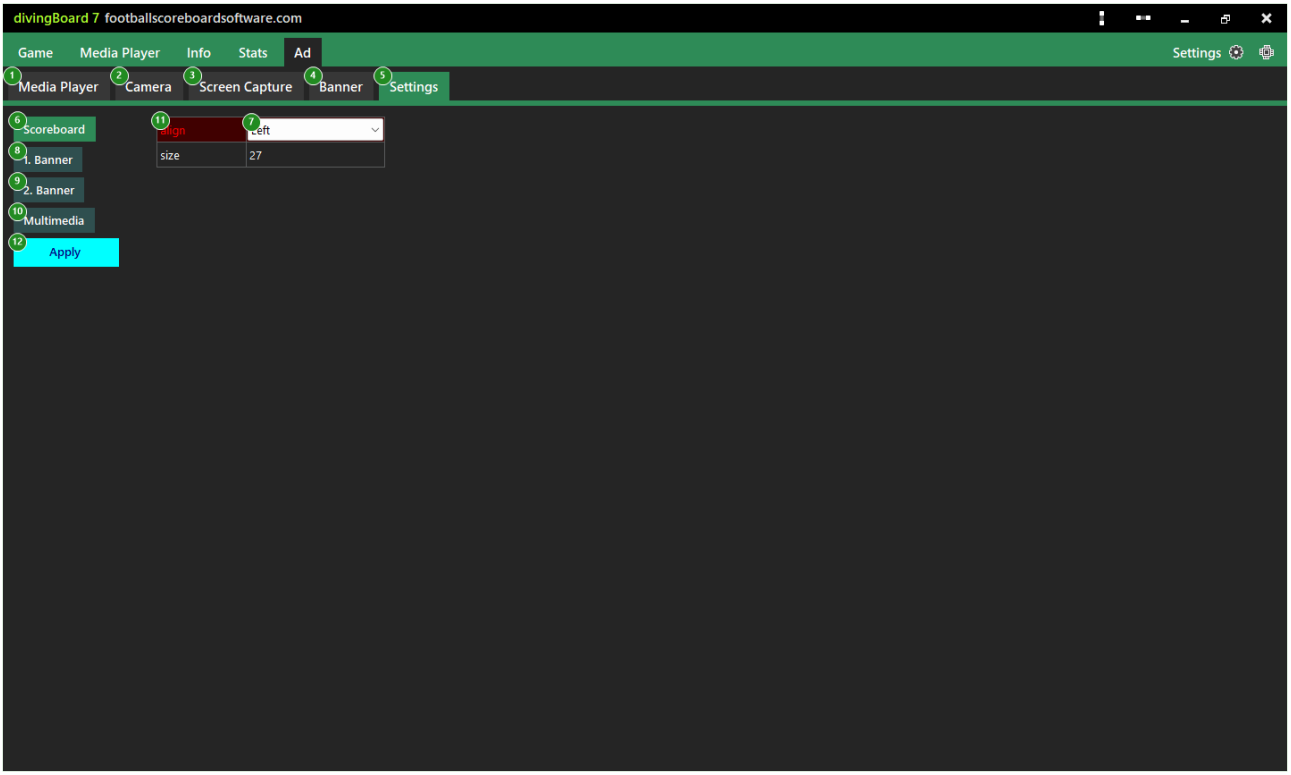



*Figure 72. Settings page.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | Media Player | **Media Player** | Opens the playlist page for the Ad screen. |
| 2 | Camera | **Camera** | Opens the camera and NDI page for the Ad screen. |
| 3 | Screen Capture | **Screen Capture** | Opens the screen capture page for the Ad screen. |
| 4 | Banner | **Banner** | Opens the editors of the two banner strips of the Ad screen. |
| 5 | Settings | **Settings** | Opens the layout settings of the Ad screen: side and size of the scoreboard and the two banners, and the display mode. |
| 6 | Scoreboard | **Scoreboard** | Shows the layout settings of the scoreboard area of the Ad screen (side and size in percent). |
| 7 | Left | **Side** | Chooses the side (Top, Bottom, Left or Right) for the align value of the selected row. |
| 8 | 1. Banner | **1. Banner** | Shows the layout settings of banner 1 (side, size, dock, visible). |
| 9 | 2. Banner | **2. Banner** | Shows the layout settings of banner 2 (side, size, dock, visible). |
| 10 | Multimedia | **Multimedia** | Shows the display mode setting for clips, camera and capture on the Ad screen. |
| 11 | align Left size 27 | **Layout Settings** | The settings of the chosen part as property and value rows. Click a value to edit it or choose from a list (align: Top, Bottom, Left, Right; dock and visible: Yes or No; sizes are a percentage of the screen). Nothing takes effect until Apply is pressed. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 12 | Apply | **Apply** | Saves the settings of the shown part and resizes the Ad screen. A banner with size 0 or visible No is cleared. |

## 20.10 Chroma Key Mode

Appears as a tab when the display mode is CK. See chapter 7.

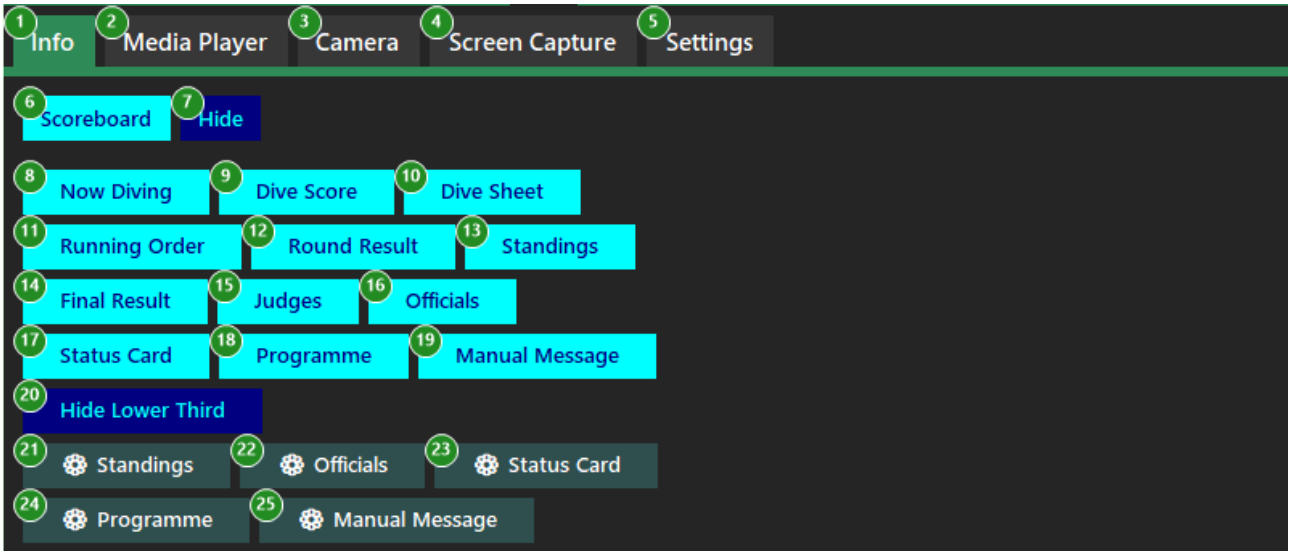



*Figure 73. Info page of the CK tab: the same screens as lower thirds.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | Info | **Info** | Opens the page with the scoreboard and lower-third buttons for the Chroma Key output. |
| 2 | Media Player | **Media Player** | Opens the playlist page for the Chroma Key output. |
| 3 | Camera | **Camera** | Opens the camera and NDI page for the Chroma Key output. |
| 4 | Screen Capture | **Screen Capture** | Opens the screen capture page for the Chroma Key output. |
| 5 | Settings | **Settings** | Opens the choice of the key colour. |
| 6 | Scoreboard | **Scoreboard** | Puts the scoreboard on the Chroma Key output. |
| 7 | Hide | **Hide** | Removes the scoreboard from the Chroma Key output. |
| 8 | Now Diving | **Now Diving** | Puts the callout for the diver on the board: name, team, dive number, dive name, position, height, DD, rank and total. It stays empty when no dive is current on the Chroma Key output as a lower third at once. The button of the screen on the air has a lime frame; Hide Lower Third takes it off. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 9 |  | **Dive Score** | Puts the callout with the points of the last published dive: the judges' awards (cancelled ones dimmed), penalty, points, total and rank. It shows nothing until the current dive is published on the Chroma Key output as a lower third at once. The button of the screen on the air has a lime frame; Hide Lower Third takes it off. |
| 10 |  | **Dive Sheet** | Puts the dive sheet of the current diver: each round with dive number, description, DD and points, the current round highlighted on the Chroma Key output as a lower third at once. The button of the screen on the air has a lime frame; Hide Lower Third takes it off. |
| 11 |  | **Running Order** | Puts the running order of the current stage (up to 12 divers, the current diver highlighted) on the Chroma Key output as a lower third at once. The button of the screen on the air has a lime frame; Hide Lower Third takes it off. |
| 12 |  | **Round Result** | Puts the result table of the current round: the best ten published dives with dive, DD and points on the Chroma Key output as a lower third at once. The button of the screen on the air has a lime frame; Hide Lower Third takes it off. |
| 13 |  | **Standings** | Puts the standings table of the stage after the last round, with rank, name, nation, total and the gap to the leader; the number of rows is set in its gear button on the Chroma Key output as a lower third at once. The button of the screen on the air has a lime frame; Hide Lower Third takes it off. |
| 14 |  | **Final Result** | Puts the final result table of the event (the first eight places, medal places highlighted) on the Chroma Key output as a lower third at once. The button of the screen on the air has a lime frame; Hide Lower Third takes it off. |
| 15 |  | **Judges** | Puts the list of the referee and the judges with their seats and nations on the Chroma Key output as a lower third at once. The button of the screen on the air has a lime frame; Hide Lower Third takes it off. |
| 16 |  | **Officials** | Puts the list of officials typed in its gear button (role, name, country) on the Chroma Key output as a lower third at once. The button of the screen on the air has a lime frame; Hide Lower Third takes it off. |
| 17 |  | **Status Card** | Puts the status card (warm-up, break, protest, equipment check, delay, medal ceremony or custom text), with a count-down if minutes are set in its gear button on the Chroma Key output as a lower third at once. The button of the screen on the air has a lime frame; Hide Lower Third takes it off. |
| 18 |  | **Programme** | Puts the programme table typed in its gear button (time, event, round, height) on the Chroma Key output as a lower third at once. The button of the screen on the air has a lime frame; Hide Lower Third takes it off. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 19 | Manual Message | **Manual Message** | Puts the manual message typed in its gear button (heading, main line, second line, big value, unit, small line) on the design of the Dive Score callout on the Chroma Key output as a lower third at once. The button of the screen on the air has a lime frame; Hide Lower Third takes it off. |
| 20 | Hide Lower Third | **Hide Lower Third** | Takes the lower third off the Chroma Key output. When the Chroma Key screen is the active display it hides the info screen on the air. |
| 21 | Standings | **Edit Standings** | Opens the editor of the Standings screen, where you set the number of rows shown. Every change is saved at once with the competition. |
| 22 | Officials | **Edit Officials** | Opens the editor of the Officials screen, where you set the list of officials (role, name, country). Every change is saved at once with the competition. |
| 23 | Status Card | **Edit Status Card** | Opens the editor of the Status Card screen, where you set the type of status, a custom text and a count-down in minutes. Every change is saved at once with the competition. |
| 24 | Programme | **Edit Programme** | Opens the editor of the Programme screen, where you set the heading and the programme rows (time, event, round, height). Every change is saved at once with the competition. |
| 25 | Manual Message | **Edit Manual Message** | Opens the editor of the Manual Message screen, where you set the heading and the five text lines of the message. Every change is saved at once with the competition. |

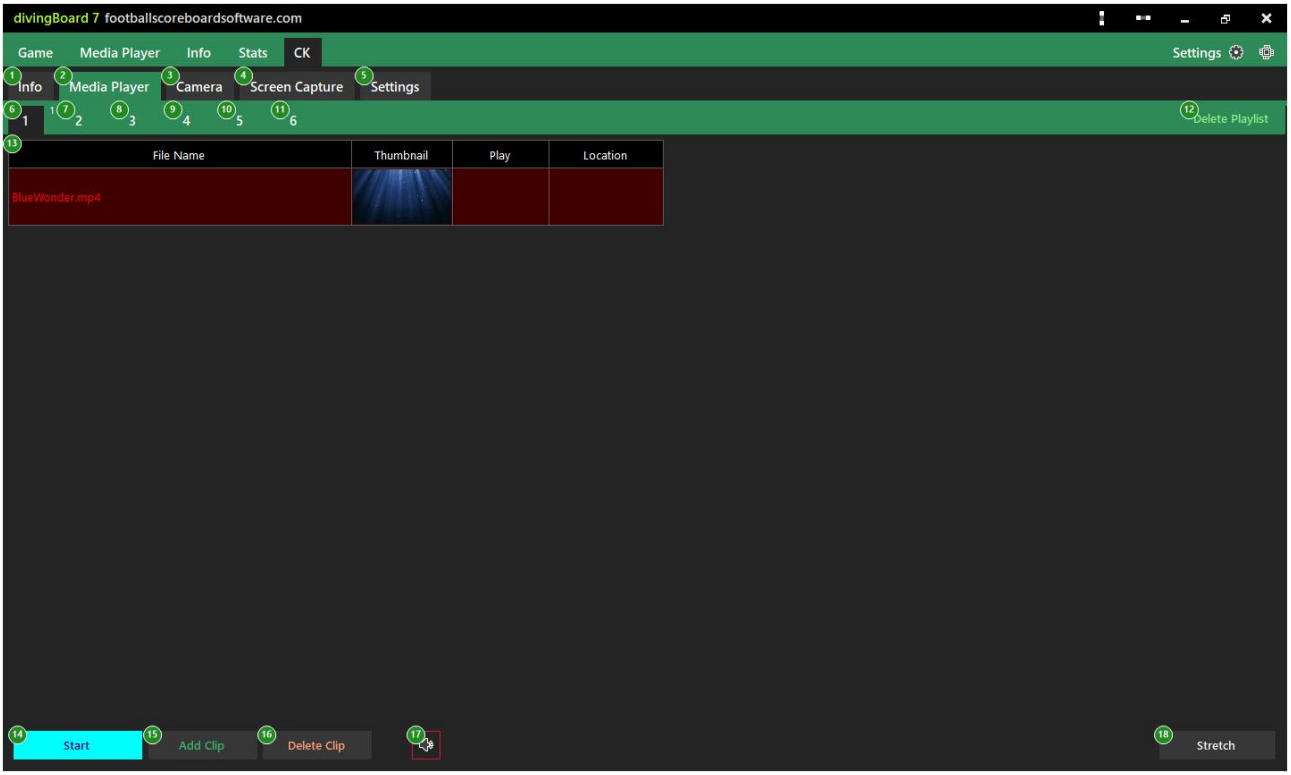
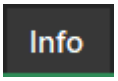
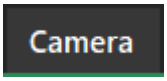
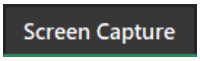
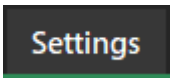
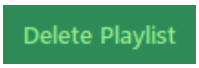
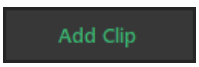
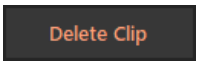



*Figure 74. Media Player page.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 |  | **Info** | Opens the page with the scoreboard and lower-third buttons for the Chroma Key output. |
| 2 |  | **Media Player** | Opens the playlist page for the Chroma Key output. |
| 3 |  | **Camera** | Opens the camera and NDI page for the Chroma Key output. |
| 4 |  | **Screen Capture** | Opens the screen capture page for the Chroma Key output. |
| 5 |  | **Settings** | Opens the choice of the key colour. |
| 6 |  | **1** | Selects playlist 1 and shows its clips. Locked while a playlist is playing. |
| 7 |  | **2** | Selects playlist 2 and shows its clips. Locked while a playlist is playing. |
| 8 |  | **3** | Selects playlist 3 and shows its clips. Locked while a playlist is playing. |
| 9 |  | **4** | Selects playlist 4 and shows its clips. Locked while a playlist is playing. |
| 10 |  | **5** | Selects playlist 5 and shows its clips. Locked while a playlist is playing. |
| 11 |  | **6** | Selects playlist 6 and shows its clips. Locked while a playlist is playing. |
| 12 |  | **Delete Playlist** | Removes every clip from the selected playlist at once, without asking. The files are not deleted. |
| 13 |  | **Clip List** | The clips of the selected playlist with file name, thumbnail, a play button and the position. Click a row to select the clip to start from and drag rows to change the order. Changes are saved with the playlist. |
| 14 |  | **Start** | Plays the playlist on the Chroma Key output from the selected clip. The button then reads Finish; pressing it stops the playback. |
| 15 |  | **Add Clip** | Opens a file dialog and adds the chosen video, picture or audio files to the playlist. Not available while a playlist is playing. |
| 16 |  | **Delete Clip** | Removes the selected clip from the playlist. Not available while a playlist is playing. |
| 17 |  | **Sound On/Off** | Switches the sound of the clips on (lime frame) or off (red frame). The choice is saved. |
| 18 |  | **Display Mode** | Chooses how a clip or picture fits the screen: Center, Cover Center, Original, Size To Fit, Size To Fit Center, Stretch or Zoom Center. Applies at once and is saved. |

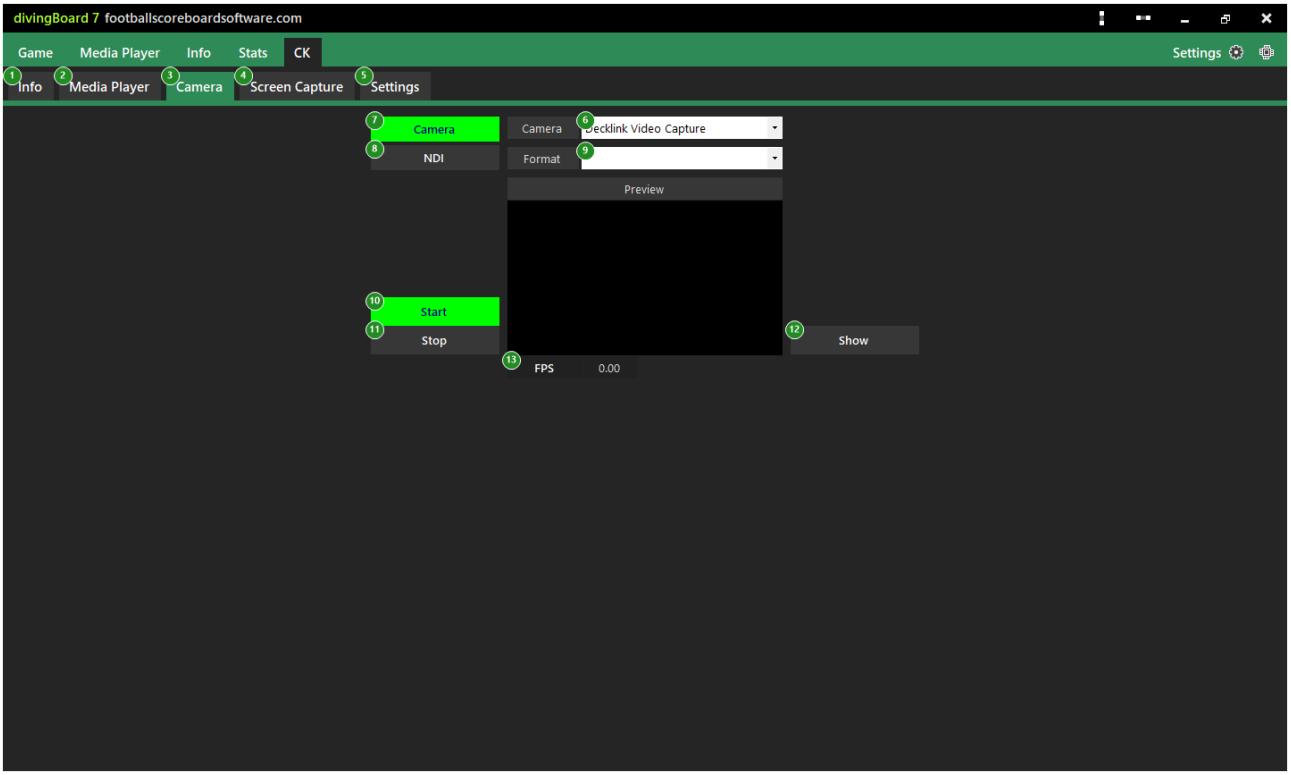



*Figure 75. Camera page.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | Info | **Info** | Opens the page with the scoreboard and lower-third buttons for the Chroma Key output. |
| 2 | Media Player | **Media Player** | Opens the playlist page for the Chroma Key output. |
| 3 | Camera | **Camera** | Opens the camera and NDI page for the Chroma Key output. |
| 4 | Screen Capture | **Screen Capture** | Opens the screen capture page for the Chroma Key output. |
| 5 | Settings | **Settings** | Opens the choice of the key colour. |
| 6 | Decklink Video Capture | **Camera Device** | Lists the video devices of the computer. Choosing one loads its formats. |
| 7 | Camera | **Camera** | Selects a camera or capture card as the source and shows its camera list. |
| 8 | NDI | **NDI** | Selects an NDI network video source and shows its source list. |
| 9 | | **Format** | Lists the resolutions and frame rates of the chosen camera; the chosen one is used on Start. |
| 10 | Start | **Start** | Starts the selected camera or NDI source in the preview only. A warning appears if no camera and format (or no valid NDI source) is selected. |
| 11 | Stop | **Stop** | Stops the running camera or NDI source and clears the preview and the Chroma Key output. Available while a source is running. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 12 | Show | **Show** | Puts the running camera or NDI source on the Chroma Key output, replacing a screen capture or clip. Available while a source is running. |
| 13 | FPS | **FPS** | Updates the figure beside it with the current frames per second of the running source. |

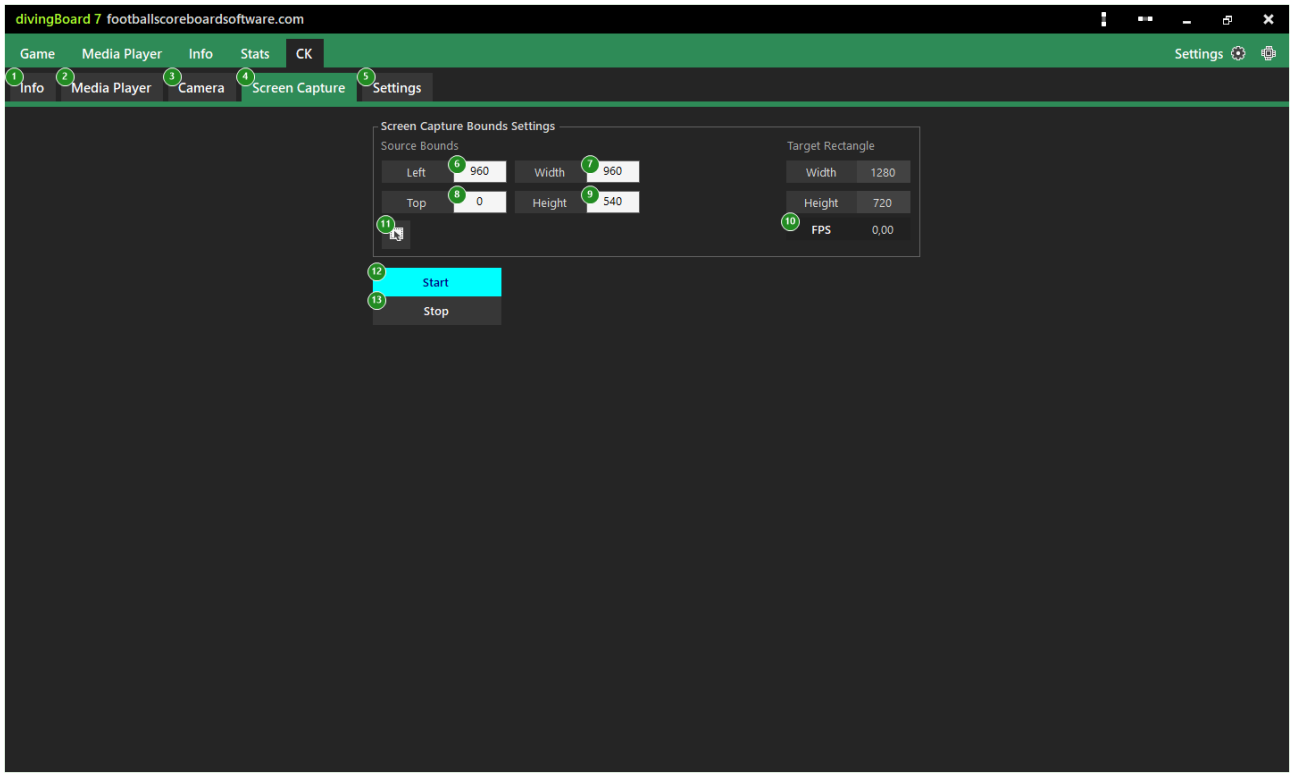



*Figure 76. Screen Capture page.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | Info | **Info** | Opens the page with the scoreboard and lower-third buttons for the Chroma Key output. |
| 2 | Media Player | **Media Player** | Opens the playlist page for the Chroma Key output. |
| 3 | Camera | **Camera** | Opens the camera and NDI page for the Chroma Key output. |
| 4 | Screen Capture | **Screen Capture** | Opens the screen capture page for the Chroma Key output. |
| 5 | Settings | **Settings** | Opens the choice of the key colour. |
| 6 | 960 | **Source Left** | Distance in pixels from the left edge of the screen to the area to capture. |
| 7 | 960 | **Source Width** | Width in pixels of the screen area to capture. Text that is not a number is turned into a number when you leave the box. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 8 | 0 | **Source Top** | Distance in pixels from the top edge of the screen to the area to capture. |
| 9 | 540 | **Source Height** | Height in pixels of the screen area to capture. Text that is not a number is turned into a number when you leave the box. |
| 10 | FPS | **FPS** | Updates the figure beside it with the current frames per second of the capture. |
| 11 | | **Select Rectangle** | Darkens the screen so you can drag the area to capture; the area fills the four source boxes. Areas that are almost empty are ignored. |
| 12 | Start | **Start** | Saves the area and starts capturing it onto the Chroma Key output, replacing a camera or clip. The area is rejected with a notice if it is not valid. |
| 13 | Stop | **Stop** | Stops the capture and clears the picture from the Chroma Key output. Available while a capture is running. |

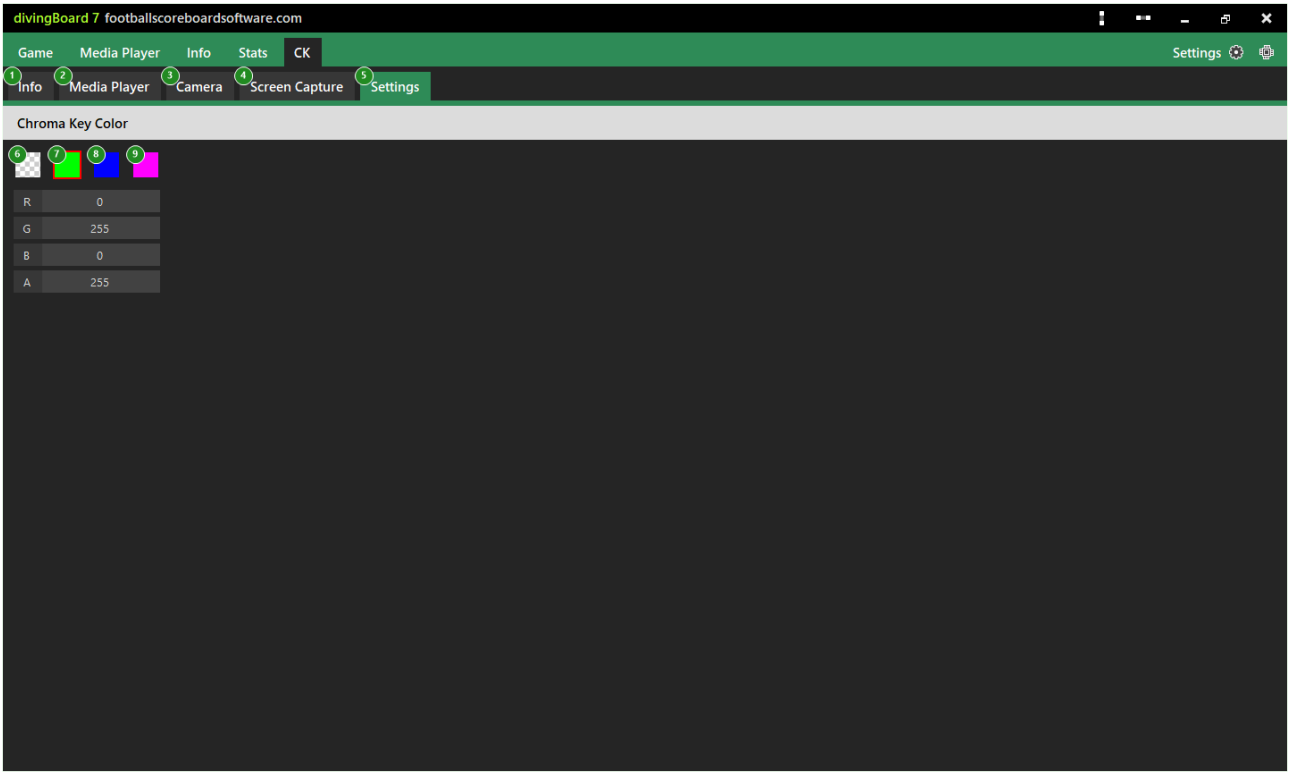



*Figure 77. Settings page.*

| No. | Control | Name | What It Does |
|---|---|---|---|
| 1 | Info | **Info** | Opens the page with the scoreboard and lower-third buttons for the Chroma Key output. |
| 2 | Media Player | **Media Player** | Opens the playlist page for the Chroma Key output. |
| 3 | Camera | **Camera** | Opens the camera and NDI page for the Chroma Key output. |

| No. | Control | Name | What It Does |
|---|---|---|---|
| 4 | Screen Capture | **Screen Capture** | Opens the screen capture page for the Chroma Key output. |
| 5 | Settings | **Settings** | Opens the choice of the key colour. |
| 6 | | **Transparent** | Sets the background of the Chroma Key output to transparent (red frame = chosen). Applied at once and saved. |
| 7 | | **Green** | Sets the background of the Chroma Key output to green (red frame = chosen). Applied at once and saved. |
| 8 | | **Blue** | Sets the background of the Chroma Key output to blue (red frame = chosen). Applied at once and saved. |
| 9 | | **Magenta** | Sets the background of the Chroma Key output to magenta (red frame = chosen). Applied at once and saved. |

## 20.11 The Judge's Phone

The page is `judge.html`, opened with the QR code of the seat or with the seat's PIN. See chapter 12.

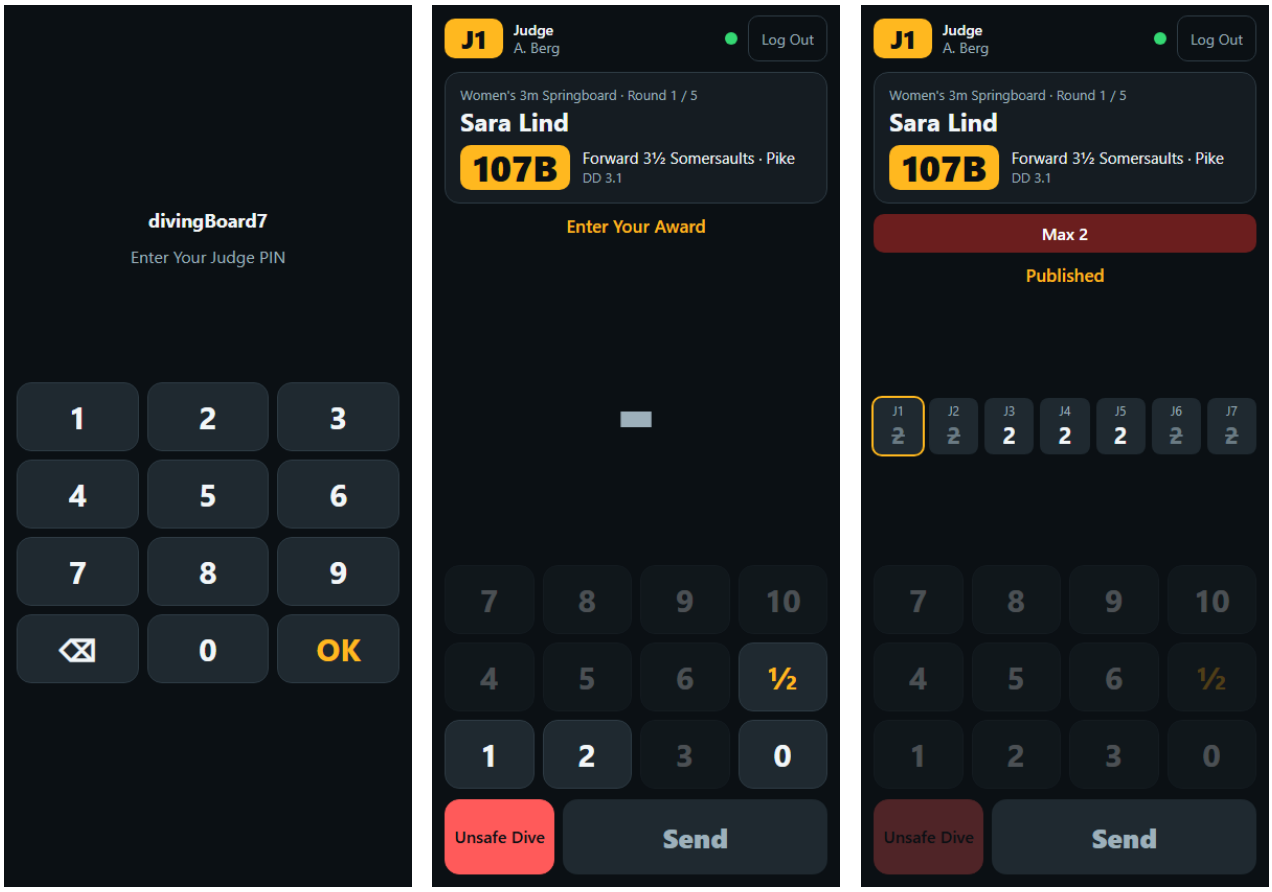



*Figure 78. PIN pad, scoring open, and the panel's awards after the publish.*

| Control | What It Does |
|---|---|
| Seat badge | The seat of this PIN: J1, or E1 and S1 in a synchronised event. |
| Dot | Green while the PC answers. When it is red the page also reads No Connection. |
| Log Out | Back to the PIN pad. The PIN is kept only in this browser tab. |
| 0 to 10 | Choose the award. A value above a declared Max 2 or Max 4½ is disabled. |
| ½ | Adds the half point to the chosen number. |
| Unsafe Dive | Tells the referee the judge finds the dive unsafe (article 10.5.4.2) and limits this award to 2. A second tap takes it back. When more than half of the panel press it, the desk asks for Max 2. |
| Send | Sends the award. The number turns green. Press another number and Send again to change it, until the operator publishes. |
| Award row | After the publish: the award of every seat as recorded, this seat in a frame, the cancelled ones struck through. No standings are shown (article 7.9.5). |

## 20.12 The Operator's Phone

Logging on: see chapter 14. The four tabs are at the bottom of the page.

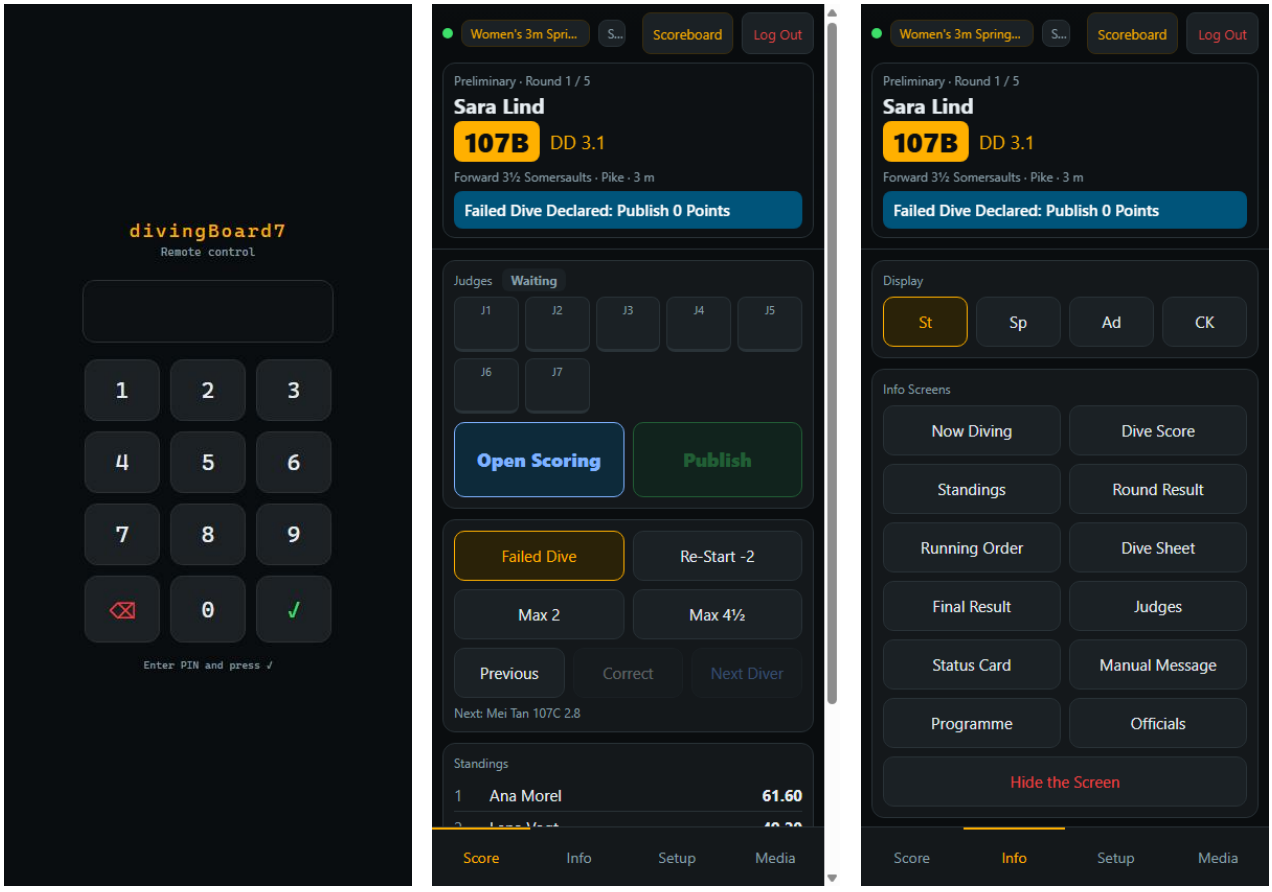



*Figure 79. Log on, the Score tab and the Info tab.*

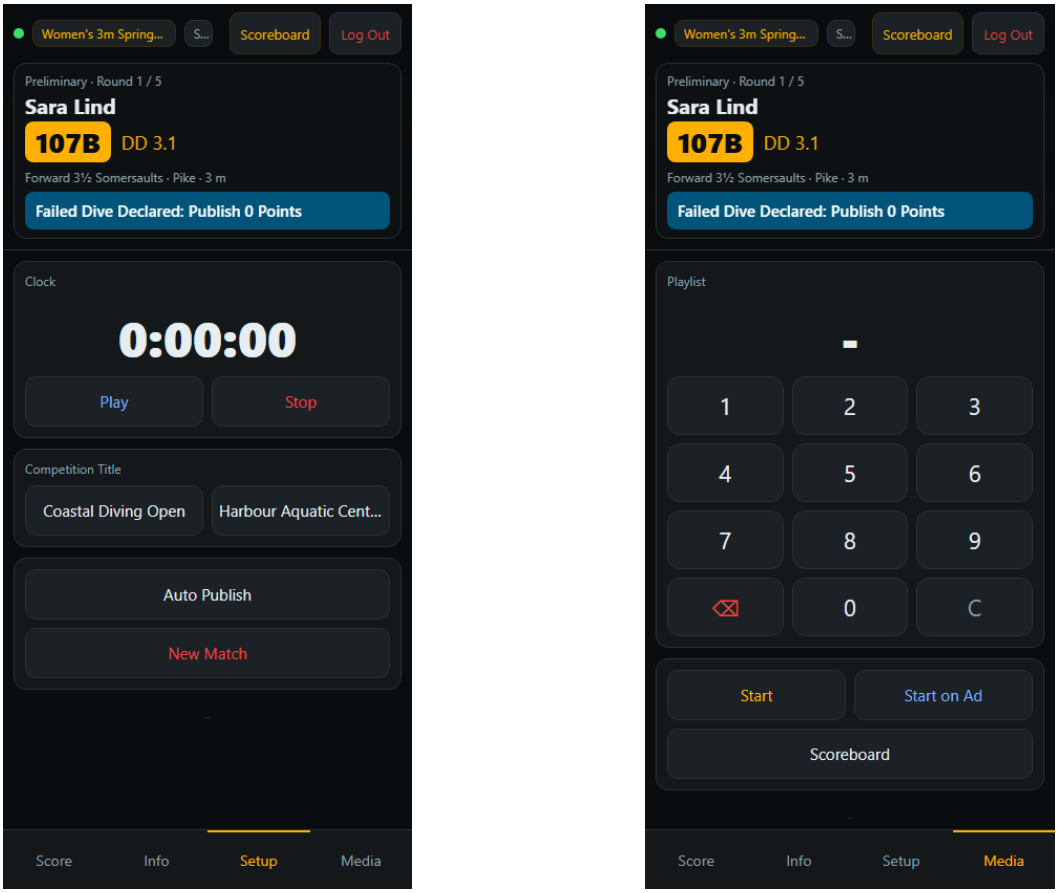



*Figure 80. The Setup tab and the Media tab.*

| Tab | Control | What It Does |
|---|---|---|
| All | Guide line | The next step of the rules, the same text as the desk's guide bar. |
| All | Scoreboard | Brings the scoreboard back on the board. |
| All | Log Out | Back to the PIN page. |
| Score | Seat tiles | The award of each seat, green edge = the judge's phone is online. While scoring is open, a tap enters an award for that seat. |
| Score | Open Scoring, Publish | The same as on the desk. Publish asks before it uses the rule's average for a missing judge. |
| Score | Failed Dive, Re-Start -2, Max 2, Max 4½ | The referee's decisions, on or off. |
| Score | Previous, Correct, Next Diver, Next Stage | The same as on the desk. |
| Info | Screen buttons | Put an info screen on the board. A second tap takes it off. |
| Info | Hide the Screen | Takes the info screen off the board. |
| Info | Display | St, Sp, Ad and CK. |

| Tab | Control | What It Does |
|---|---|---|
| Setup | Clock | Tap the time to set it. Play and Stop run the clock of the board. |
| Setup | Competition Title, Venue | The two lines of the board. |
| Setup | Auto Publish | On or off. |
| Setup | New Match | Starts the scores of this competition again after a question. |
| Media | Playlist pad | Type the number of the playlist. |
| Media | Start, Start on Ad | Start the playlist on the board, or on the Advertisement board. |
| Media | Scoreboard | Brings the scoreboard back. |

# 21. Competition Scenarios

Each scenario here is a whole competition or a difficult moment, step by step. All names are fictional. The figures in the examples are real results of the program.

## 21.1 Scenario 1: An Individual Event from Start to Finish

Women's 3 m Springboard, World Aquatics format: eight divers, 7 judges with phones, a preliminary, a semi-final and a final of five dives each. The program is installed and licensed, the LED is connected, and one operator sits at the desk.

### The Day Before

1. Click **New Competition**. Set the list to **World Aquatics**, choose **Women's 3m Springboard**, type the title, the venue, the date and the referee, then click **Create Competition**. The program moves the old competition to the archive.
2. Click **Entries and Dive Sheets**. Click **Add** for each diver, then type the name, the team and the three-letter country code. A CSV file can do the same: click **Import CSV** (section 10.6).
3. Select each diver and type the dives of the sheet. Type `107C` in Dive Number and the DD comes from the table. Read the line under the sheet: it must say Sheet Complete.
4. Click **Random Draw** to draw the running order (article 4.1.6).
5. Click **Judges**, type the seven names and the country codes, then click **Print Judge Cards**. Each card has the QR code and the PIN of one seat.

The guide bar on the desk now reads "On the Board: Ana Morel, 107C. Open Scoring After the Dive". If it names something else, such as "Dive Sheets Missing: 2" or "Enter the Referee", do that first.

### On the Day

1. Click **LED Output** and put the board on the LED screen.
2. In **Settings > Remote Control**, switch the remote on. The judges scan their QR codes. On the desk each tile gets a green line.
3. Run a test: click **Open Scoring**, ask each judge to send a number, and check the tiles. Then open **New Competition**, click **Clear the Scores** and close the window, so that the test leaves nothing on the record.
4. Show the **Judges** info screen, then **Running Order**, during the warm-up. Click **Hide** before the first dive.

## One Dive

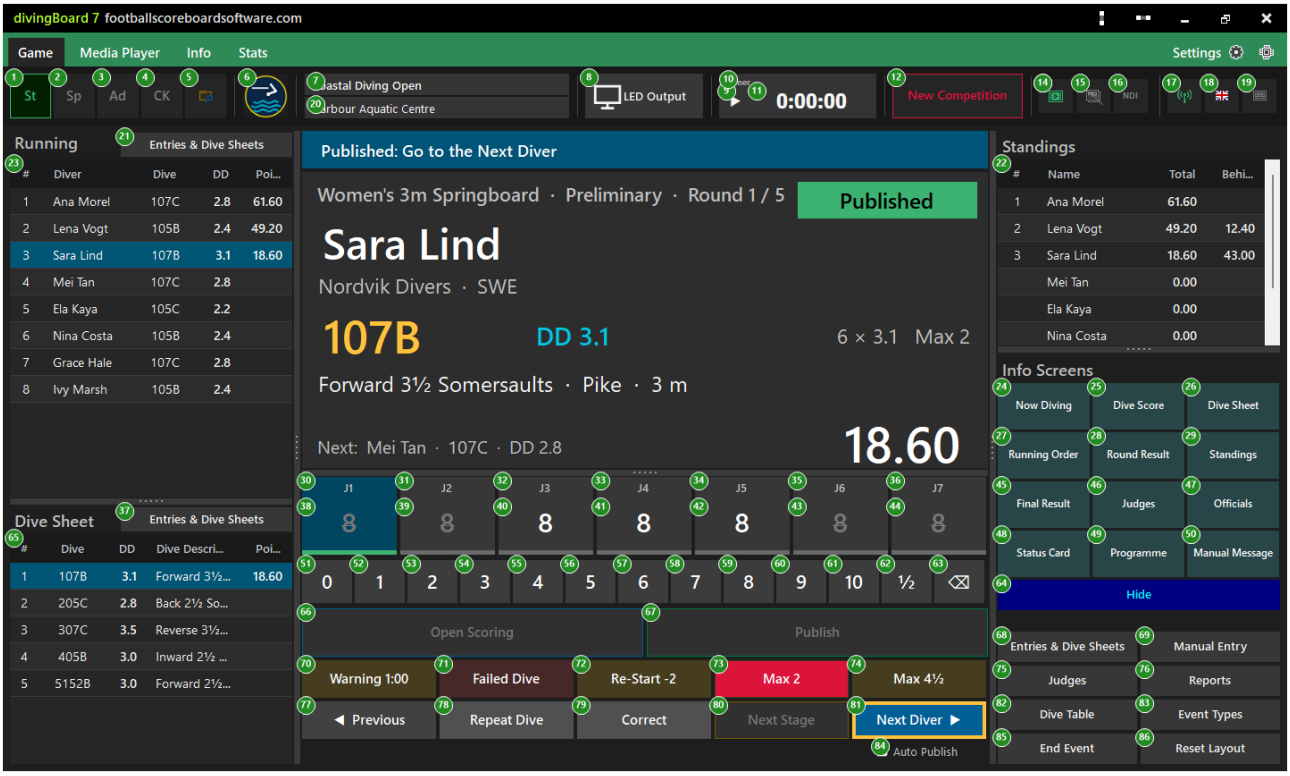



*Figure 81. After the publish the guide bar turns to the next step and Next Diver has the gold frame.*

1. The guide bar names the diver, and the board shows the dive. The diver dives.
2. Click **Open Scoring** (numpad 0). The state tag turns gold and the judges' phones open.
3. The awards arrive on the tiles. The bar counts them: "Waiting for the Judges: 5 of 7 Awards In".
4. When all seven are in, the bar reads "All Awards Are In: Publish". Click **Publish** (numpad Enter).
5. The board shows the awards, with the two highest and two lowest struck through, the points, the total and the rank.
6. Click **Next Diver** (numpad 6).

For example, Ana Morel dives 107C (DD 2.8) and the judges give 7, 7.5, 7.5, 8, 7, 8, 8.5. The two lowest awards (7, 7) and the two highest (8.5, 8) are cancelled, and the rest add up: 7.5 + 7.5 + 8 = 23. Then 23 × 2.8 = 64.40 points.

## The End of a Stage

1. After the last dive of the preliminary the bar reads "Stage Complete: 8 Entries Go Through to the Next Stage". The event allows 18, so all eight go on.
2. Show **Standings**, then click **Next Stage** and confirm. The running order is reversed: the leader dives last. Totals start from zero (article 4.1.13).
3. The dive sheets go along. A diver may change the dives within 30 minutes of the end of the stage (article 6.7.3): open Entries, choose the stage in the list above the sheet and change the dives before the stage starts.
4. After the final the bar reads "All Dives Are Published: Finish the Competition". Click **Finish**.

## After the Final

1. Click **Final Result** on the desk. It shows the top eight, with the medal places marked.
2. Click **Reports**, choose **Detailed Results** and the stage, then click **Print** or **Save PDF**. Make one report per stage. The referee signs them (article 8.8.1).

3. The next **New Competition** puts this competition in the archive.

## 21.2 Scenario 2: A Difficult Afternoon

Every event below happens at some point. Each one starts with the desk at the dive in question.

### The Diver Stops on the Board

The diver starts the approach and stops. The referee declares a restart.

1. Click **Re-Start -2** (numpad 8). The button turns red.
2. The diver dives again. Run the dive as usual. The program takes 2 points off each award.
3. If the second attempt also fails, click **Failed Dive** (article 8.6.5.1).

If the restart is for strong wind (article 8.5.1), no points are deducted: do not press Re-Start -2.

### The Diver Does Not Dive

1. The referee warns the diver. Click **Warning 1:00**. The button counts down on a gold background.
2. If the diver dives, carry on as usual; the count stops at the next diver.
3. At 0:00 the button turns red and the message line says that the time is up. Click **Failed Dive**, then **Publish**. No awards are needed (article 8.5.5).

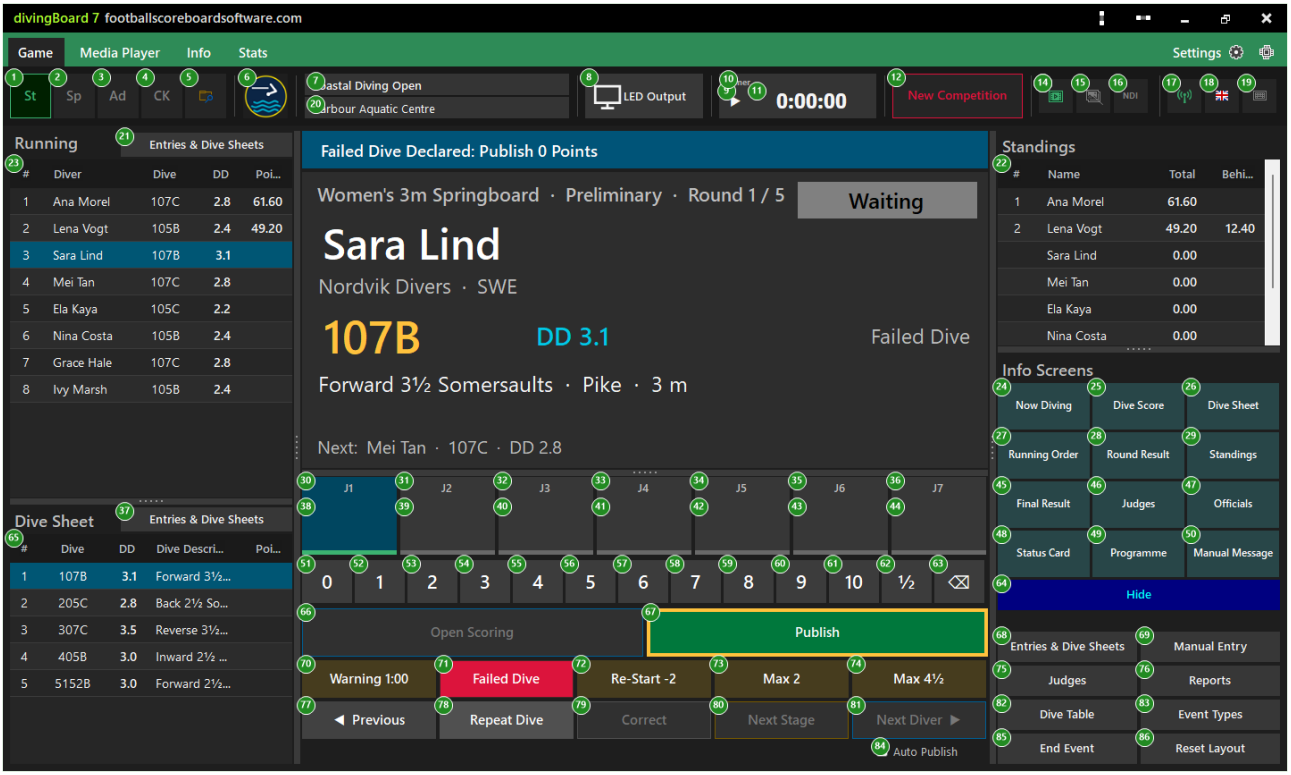



*Figure 82. Failed Dive declared: the guide bar goes straight to Publish.*

### The Wrong Dive

| What Happened | What the Referee Does | What to Do |
|---|---|---|
| The dive differs from the one announced correctly | Failed dive (8.4.6) | Failed Dive, Publish |
| Right number, wrong position | Maximum 2 (8.4.7) | Max 2, then the awards as usual |

| What Happened | What the Referee Does | What to Do |
|---|---|---|
| The announcement was wrong and the diver followed it | Cancels the awards, correct dive at once (8.4.4) | Repeat Dive, then change the dive in Manual Entry if the sheet was wrong |
| The dive was before the whistle | Repeats it, or lets it stand (8.5.6) | Repeat Dive, or carry on |

## An Unsafe Dive

Judges press **Unsafe Dive** on their phones. When more than half of the panel have pressed it, the guide bar turns gold and Max 2 has the frame.

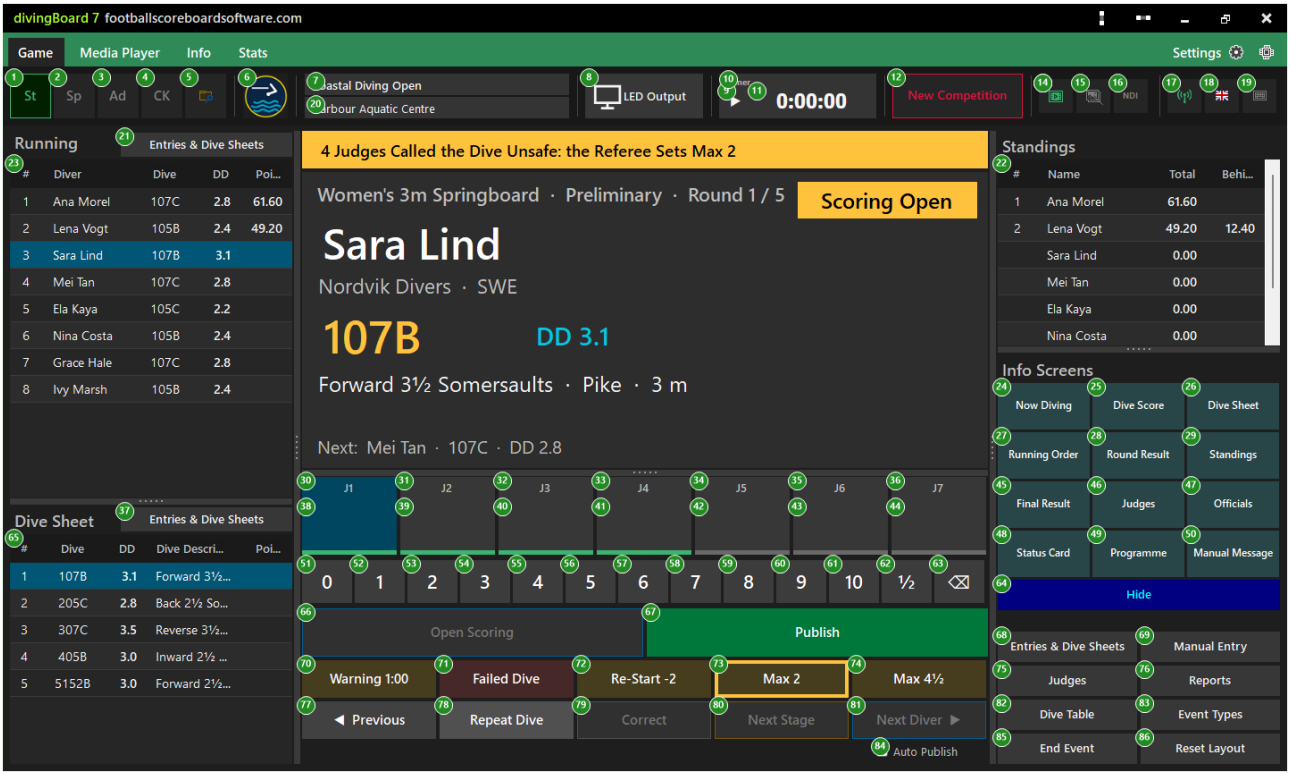



*Figure 83. Four of seven judges called the dive unsafe.*

1. Click **Max 2** when the referee confirms it (article 10.5.4.2).
2. Publish as usual. Each award above 2 counts as 2. With seven awards of 8 and DD 3.1 the result is 2 + 2 + 2 = 6, and 6 × 3.1 = 18.60 points.

## A Phone Stops Working

The tile of that seat loses its green line, and the phone shows No Connection.

- Ask the judge for the award and type it in the tile.
- If there is no award at all, click **Publish** and answer Yes to the question. The program uses the average of the other judges, rounded as the rules ask (article 9.1.6): 7.24 counts as 7, 7.25 as 7.5, 7.75 as 8.
- If the judge cannot go on, the referee brings in the reserve judge (article 7.8). The reserve takes the same phone or scans the same QR code. Change the name in the Judges window.

### A Wrong Award

Before the publish the judge sends a new number. After the publish:

1. Go back to the dive: click the diver in the Running Order, or use **Previous** for an earlier round.
2. Click **Correct** (numpad -). The dive opens again with its awards.
3. The judge sends the right award, or you type it in the tile. Click **Publish**. Totals and ranks follow.

### A Repeated Dive

The referee allows a repeat for exceptional circumstances (article 8.4.5).

1. Click **Repeat Dive** and confirm. The dive goes back to Waiting.
2. The first awards leave the results but are noted, as the rules ask. The Detailed Results report lists them under Awards Set Aside.

### A Diver Withdraws

- **Before a stage starts:** open **Entries and Dive Sheets** and set **Status** to DNS or WD. If that leaves fewer divers than the stage needs, the next ranked diver comes in and dives first, and the message line names the diver. If several are tied, all of them come in (article 4.1.12).
- **During a stage:** set Status to WD. The diver keeps the dives so far, takes no rank and is skipped. The guide bar sends you on if it was that diver's turn.
- **Disqualified:** set Status to DSQ. The report shows DSQ in place of the rank.

### A Tie

- Equal totals share a place (article 4.1.5), and the next place is left out: 1, 2, 2, 4.
- A tie on the last qualifying place takes all the tied divers through. The guide bar says so before you click Next Stage.
- When two divers with equal totals go on, the order between them is drawn by lot, and the message line names them (article 4.1.8). If the referee draws the lot by hand, change the order in the Entries window before the stage starts.

### A Break

1. Open **Manual Entry**, then type a heading, a main line and a big value under Message on the LED.
2. Click **Show on LED**. Click **Hide** when the break ends. The competition continues from where it stopped (article 8.4.2.1).




*Figure 84. A message typed in Manual Entry, on the board.*

### The Event Cannot Continue

1. Click **End Event** and confirm.
2. The results now count up to the last completed round (article 8.4.2.2). A dive of an unfinished round no longer counts, and the reports say the event ended early.
3. If the event can continue after all, select a dive and click **Correct**.

## 21.3 Scenario 3: Synchronised Diving

Men's Synchronised 3 m: 11 judges, 6 rounds. Pairs are entered as one entry: type the partner in the Partner column of the Entries window.




*Figure 85. A synchronised event on the desk: seats E1 to E6 and S1 to S5.*

- Seats E1, E2, E3 judge the execution of the first diver, E4, E5, E6 of the second, and S1 to S5 the synchronisation. With 9 judges there are E1 to E4 and S1 to S5.
- The first two rounds have a fixed DD of 2.0. The sheet fills it in by itself.
- The program cancels the highest and lowest of each group, adds the rest, and multiplies by 3/5, then by the DD. For example, 35.5 × 3/5 = 21.3, and 21.3 × 2.8 = 59.64 points.
- If all execution judges of one diver, or all synchronisation judges, give 0, the dive is failed by itself (articles 11.6.3, 11.7.5).
- A missing award uses the average of the same group, so the panel keeps its balance (article 9.1.7).

World Aquatics Championships use a preliminary and a final, with the top 8 going on: choose the presets that end in **Preliminary and Final**. The Olympic format is a direct final: choose the others.

## 21.4 Scenario 4: A High School Dual Meet

The Northfield Dual Meet: four divers from two schools, three judges, six dives on the 1 m board. Check the preset against the rules of your state (section 6.6).

1. In **New Competition**, set the list to **US High School (NFHS)** and choose **High School 6-Dive Dual Meet**.
2. Enter the divers with the school in Team, and the Grade. The Grade column appears only in US formats.
3. No phones are needed: read the judges' flash cards aloud and enter them at the desk. Click Open Scoring, then type three numbers in the tiles. Enter moves to the next tile.
4. With three judges nothing is cancelled: all three awards count.
5. After the last dive click **Finish**, then **Reports**. Set Rule Set to **US High School (NFHS)** and Report to **Official Diving Score Sheet**: there is one sheet per diver with signature lines. **Meet Results** adds the team scores.

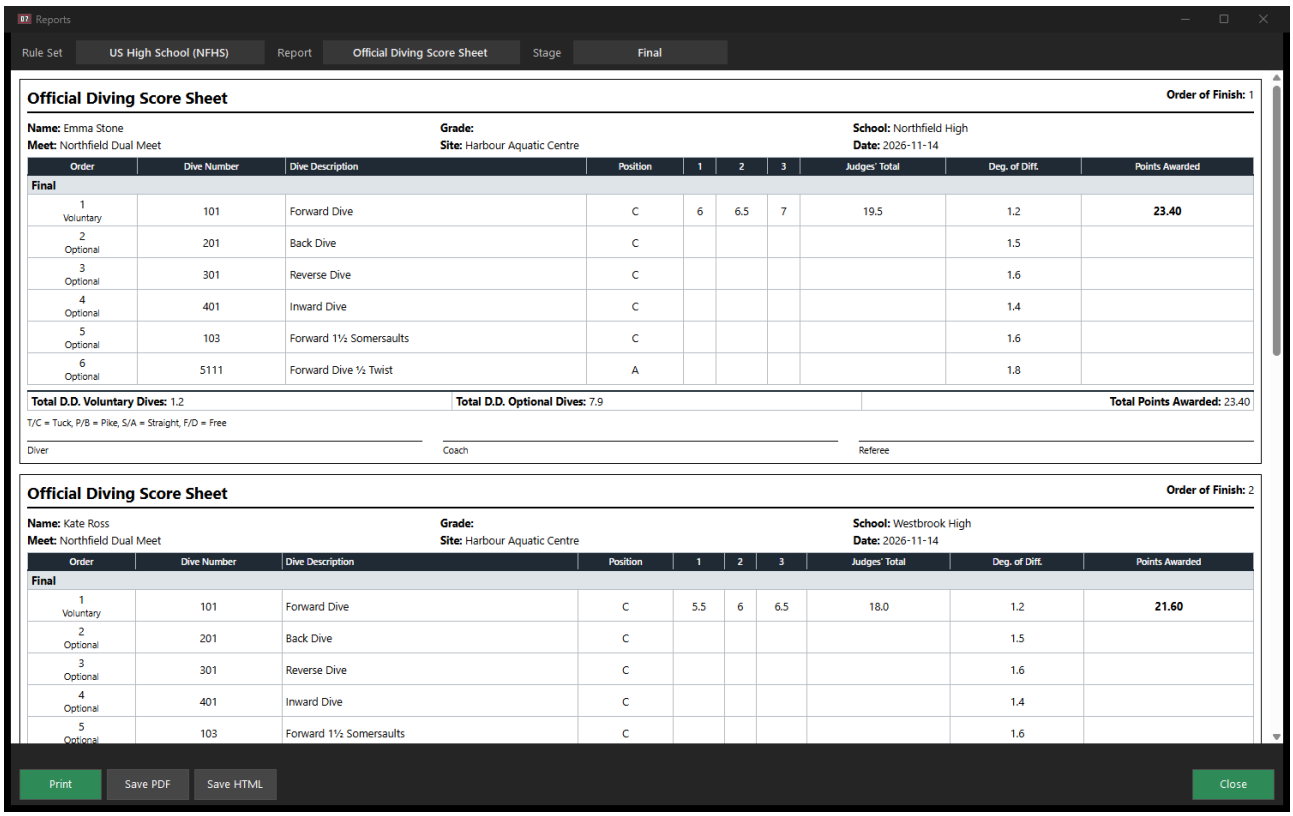



*Figure 86. The NFHS score sheets of the meet.*

## 21.5 Scenario 5: A Mixed Team Event

The Mixed Team Event has six dives per team: women, men and a mixed pair, three dives on the 3 m board and three on the 10 m platform.

1. Enter the team as one entry.
2. On the dive sheet, type who dives each round in the Diver column. The board shows that name.
3. Rounds with a pair use the synchronised formula only with a 9 or 11 judge panel. With 7 judges they score like individual dives.

## 21.6 Scenario 6: Without Phones, or With No Awards at All

Everything works from the desk alone.

- **Paper cards:** after Open Scoring, click a tile, press a number on the pad, and the marker moves to the next seat. ½ adds the half point to the number just entered.
- **No awards at all:** if only the result of a dive reaches you, open **Manual Entry**, type the points under Points by Hand and click **Use These Points**. The guide bar says to publish them. The reports mark the dive By Hand. **Back to the Awards** undoes it before the publish.
- **A dive that is not on the sheet:** in Manual Entry type the number, choose the position and click **Change the Dive**. Type a DD to use your own value, for example for a high diving height. The change is refused once awards are in: click Repeat Dive first.

## 21.7 Scenario 7: LED Wall and Television Together

The LED shows the Standard board, while the broadcaster needs lower thirds over the picture.

1. Choose **CK** on the desk. The board window turns into a key colour with the scoreboard as a lower third.

2. Send the output by **NDI** with the icon in the banner, or give the window to the vision mixer (chapter 7).
3. On the CK tab the same screens appear as lower thirds. **Hide Lower Third** takes one off.

One program shows one display mode at a time. To run the LED and the keyed output at once, see Typical Set-Ups (section 7.9).

# Appendix A: Rules Sources

divingBoard 7 scores by the published rules below. The event types follow these documents; every value can be changed in the Event Types editor (chapter 6.3). Check the current edition of the rules of your competition before an event.

| Rule Set | What the Program Uses | Source |
|---|---|---|
| World Aquatics | Competition format (articles 4 and 5), statement of dives (6), the referee (8), the secretariat and the scoring (9), judging (10), synchronised diving (11), penalties (12), the DD formula (Appendices 8 and 10) and the DD tables (Appendices 9 and 11) | World Aquatics Competition Regulations, Part Four, in force from February 2026 |
| NFHS | The 6-dive and 11-dive formats, the order of voluntary and optional dives, the layout of the score sheet | NFHS score sheet |
| NCAA | The limits 9.0, 9.5 and 7.6, the 11-dive championship format | Public summaries of the NCAA rules |

Notes:

- The US presets (numbers of dives, limits, advance counts and team points) come from the NFHS score sheet and from public summaries, not from the current rule books. State and conference rules differ, and the US DD tables may differ from the World Aquatics one. They must be checked against the current NFHS, NCAA and state rules before use (chapter 6.6).
- A Mixed Team Event with 7 judges scores its synchronised rounds like individual rounds. The synchronised formula needs a panel of 9 or 11 judges.
- The referee's majority rule for unsafe dives (article 8) is not automatic: the operator presses Max 2 after the referee's decision.
- There are no factory DD values for high diving: the customer adds them (chapter 6.11).

# Appendix B: HTTP API Command Reference

## B.1 Commands

Request: http://<PC address>:1907/api.html?_=<number>&pin=<PIN>&cmd=<command>&value=<value>$ (chapter 15).

| Command | Value | What It Does |
|---|---|---|
| open_scoring | – | Opens the current dive for the judges. |
| manual_points | points, or empty | The points of the current dive typed by hand; empty goes back to the awards. |
| end_event | – | The event cannot continue: results up to the last completed round. |
| award | seat\|value | An award entered by the operator. Seat 0 is the first judge, value 0 to 10 in half points, for example 0\|7.5. |
| publish | – | Publishes the dive. Needs every award, unless the dive is a Failed Dive. |
| publish | force | Publishes with the rule's average for the missing judges. |
| reopen | – | Correct: takes a published dive back to scoring. |
| repeat | – | The referee's repeat: the awards are cleared and the dive waits again. |
| penalty | Failed, Restart, Max2, Max45 | Switches a referee's decision on or off. |
| next_diver, prev_diver | – | Moves through the running order, round by round. |
| next_stage | – | Closes the stage: the top N go on in reverse order. On the last stage it finishes the competition. |
| auto_publish | 1, 0 | Switches Auto Publish on or off. |
| new_match | – | The scores of this competition start again, without a question; a copy goes to the archive first. The dive sheets stay. |
| match | – | Game tab to the front and the scoreboard back on the output (stops a video, takes an info screen off). |
| click | St, Sp, Ad, Ck | Switches the display mode (and brings the scoreboard back). |
| click | playpause, stop | Clock play / pause; stop pauses. |
| set_chronometer | play, pause, stop, time | Clock: play, pause, stop (first call pauses, second resets to zero), or a time mm:ss or h:mm:ss. Timer and countdown only. |

| Command | Value | What It Does |
|---|---|---|
| line_text_1, line_text_2 | Text | Competition title, venue (_ = line break). |
| start_playlist | 1-20 | Media Player: plays playlist 1-6 (buttons) or 7-20 (list). A call while a playlist plays stops it. |
| start_playlist_ad_screen | 1-6 | Switches to Ad and plays playlist 1-6 of the Ad page. A call while a playlist plays stops it. |
| info_show | Screen[\|Field=value...] | Sets fields and shows an info screen: Diver, Score, Sheet, StartList, Round, Standings, Final, Panel, Officials, Status, Order. |
| info_hide | – | Takes the info screen off (CK: the lower third fades out). |
| info_set | Field=value | Sets one field (see B.3). |
| info_list | List=c1~c2\|c1~c2 | Replaces a list (see B.3); empty clears it. |
| judge_get | – | Judge PIN: the state of the current dive for this seat. |
| judge_award | Value | Judge PIN: the award of this seat, 0 to 10 in half points. It can be changed until the operator publishes. |
| GET | – | The state as XML (B.2). |

A judge's seat PIN opens judge_get and judge_award and nothing else. Any other command with a seat PIN is refused with #Invalid PIN, and so is a seat beyond the panel of the running event. The judge reply is one Judge element with Seat, Role, Name, Event, Round, Diver, Dive, DiveName, DD, State, Max, Penalty, Award, Refusal and Labels. State is Waiting, Scoring or Published. Max is 2 or 4.5 when the referee has capped the dive.

## B.2 The GET Reply

| Field | Meaning |
|---|---|
| BoardType | Display mode: St, Sp, Ad, CK |
| Home, Guest | The current diver, the diver's team |
| HomeScore | The running total |
| Chronometer, StatusChronometer | Clock text; True while it runs |
| Period | The round |
| Extra01, Extra02 | Title and venue |
| PlaylistStarted, AdPlaylistStarted | The running playlists |
| Sport | Diving |
| Serial | Changes with every change of the competition |
| EventName, EventId, Synchro | The event |

| Field | Meaning |
|---|---|
| Stage, RoundLabel | For example Preliminary and Round 2 / 5 |
| Diver, Team | The current diver and team |
| Dive, DiveName, DD | For example 5253B, Back 2½ Somersaults 1½ Twists · Pike · 3 m, 3.4 |
| DiveState | Waiting, Scoring, Published |
| Penalty | Sum of 1 Failed, 2 Restart, 4 Max2, 8 Max45 |
| PenaltyText, Points | The penalty text; the points once published |
| Awards | seat~award~state~o\|... State 0 none, 1 in, 2 cancelled; o = the judge's phone is online |
| Standings | rank~name~total\|... (top 8) |
| NextDiver | The next diver with dive and DD |
| StageComplete, LastStage, Finished, AutoPublish | True or False |
| ActionSerial | Counts the published dives |
| Refusal, RefusalSerial | The reason of the last refused action; the serial counts them |
| InfoOnAir | The info screen on air (its key) |
| InfoScreens, Labels | key~label\|...: the info screens and the remote-page texts in the program language |

## B.3 Info Fields and Lists

| Field | Values |
|---|---|
| Standings.Top | Number of rows |
| Status.Type | WarmUp, Break, Protest, EquipmentCheck, Delay, Ceremony, Custom |
| Status.Text | Text for Custom |
| Status.Minutes | Countdown in minutes, 0 = none |
| Order.Title | Text |

| List | Columns (separated by ~) |
|---|---|
| Order.Rows | time ~ event ~ round ~ height |
| Officials.Rows | role ~ name ~ country |

## B.4 Accepted Without a Diving Meaning

These commands of the shared Board7 protocol are accepted, logged and have no effect: set_home_score_up, set_home_score_down, set_guest_score_up, set_guest_score_down, set_home_score, set_guest_score, stats_show, stats_set, stats_add, stats_clear, info_goal, info_card, info_subst, and click first_half, second_half, extra_1, extra_2, show_added.

# Appendix C: Glossary

| Term | Meaning |
|---|---|
| Armstand | A dive that starts from a handstand on the platform edge (group 6). |
| API | The HTTP command interface on port 1907 (chapter 15). |
| Assigned round | A round with a fixed DD, for example 2.0 in synchronised events. |
| Award | A judge's mark for a dive, 0 to 10 in half points. |
| Board | The output window with the graphics (Standard, Sponsored, Advertisement or Chroma Key). |
| Cancelled award | An award that does not count: the highest and lowest ones of a panel. |
| Chroma key (CK) | Graphics on a solid key colour that a vision mixer replaces with the camera picture. |
| Correct | Takes a published dive back to scoring. |
| DD | Degree of difficulty: the factor of a dive, from the dive table. |
| DEMO | The program without a valid licence. |
| Display mode | St, Sp, Ad or CK. |
| Dive number | The code of a dive, for example 107C. |
| Dive sheet | The list of dives of an entry. |
| Dive table | The table of dive numbers and DD values per height and position. |
| Entry | A diver, a synchronised pair or a team in a competition. |
| Event type | The template of an event: rounds, judges, limits and stages. |
| Execution judge | In synchronised events, a judge who marks one of the two divers. |
| Failed dive | A dive that scores 0 points by the referee's decision. |
| Group | One of the six dive families: forward, back, reverse, inward, twisting, armstand. |
| High diving | Diving from 20 m or 27 m; the heights are added by the customer. |
| Info screen | A graphic with competition information shown instead of the scoreboard, or as a lower third in CK. |
| IOC code | The three-letter country code used in sport (GBR, FRA ...), which selects the flag. |
| Keep Total | A stage that continues the total of the stage before. |
| Limited round | A voluntary dive that counts towards the Voluntary DD Limit. |
| Lower third | A graphic in the lower part of a TV picture. |
| Master | A factory design: Navy, Charcoal or Clay. |
| Max 2, Max 4½ | The referee's cap on the awards of a dive. |
| NAT | The country code of an entry or a judge. |

| Term | Meaning |
|---|---|
| NDI | A standard for video over the network; divingBoard 7 can send and receive NDI. |
| On air | Shown on the output now. |
| Optional dive | A dive without a DD limit (a Free round). |
| Panel | The judges of an event. |
| PIN | The code that protects the remote control, or a judge's seat. |
| Position | How the body is held: A Straight, B Pike, C Tuck, D Free. |
| Publish | Confirms a dive: the points count and appear on the board. |
| Re-Start | A new start of a dive; 2 points are taken from each award. |
| Referee | The official who decides penalties and repeats. |
| Repeat Dive | The referee's decision that the diver dives again. |
| Round | One dive of every entry. |
| Running order | The order of the entries in a stage. |
| Scorebug | The small score graphic of the CK mode. |
| Seat | One place on the panel, with its own PIN: J1, E1, S1 .... |
| Stage | A part of an event: Preliminary, Semi-Final or Final. |
| Synchronisation judge | In synchronised events, a judge who marks how well the pair dives together. |
| Synchronised diving | Two divers dive at the same time and count as one entry. |
| u | The board unit of the designs: 1 % of the board height on 16:9 boards. |
| Voluntary dive | A dive of a Limited round. |
| WD | Withdrawn: the entry takes no further part. |
| DNS | Did not start. |
| DSQ | Disqualified. |
| Guide bar | The line over the diver card that names the next step. |
| Reserve | The next ranked diver, who comes in when a qualifier cannot start. |
| Set aside | Awards of a repeated dive: they count for nothing but stay on the record. |
| WebView2 | The Microsoft Edge component that draws the boards. |

# Appendix D: Competition-Day Checklist

Before the event:

1. Licence: the licence icon at the right of the menu bar shows a CPU or USB symbol, not a padlock (chapter 3).
2. Board output: Settings > Screen Properties L, T, W, H match the LED or second monitor; Windows display scaling of that monitor is 100 % (chapter 7.2, 19.2).
3. Design: the right master or your own design is applied in every display mode you will use (chapter 8).
4. Event type: rounds, limits, judges and stages fit your rules. Check the US presets against the current rules (chapter 6.6).
5. Data: entries, dive sheets, judges, officials and programme are filled in; the sheet warnings are read (chapters 9, 10 and 12).
6. Sponsors and media: sponsor logos, playlists and background video are in place (chapter 13).
7. Remote: switched on, PIN changed, the phones logged in, a test dive given, then New Competition > Clear the Scores (chapters 12 and 14).
8. Keyboard shortcuts: switched on if used, NumLock on (chapter 16).
9. NDI or video output: the receiver or vision mixer shows the board; for keying use CK with a key colour (chapter 7.6).

Before each event:

1. New Competition, then the entries and the title and venue lines.
2. The judges' names, and a green online mark for every phone.
3. The clock in the mode you want, at zero.
4. The display mode for the moment (St, Sp, Ad or CK) and the scoreboard on the output.

During the event:

- One person runs the flow: follow the guide bar and the gold frame.
- Watch the online marks. Type an award at the desk when a phone has dropped out.
- Enter the referee's penalties as they are called. Use Correct at once after a wrong award.

After the event:

- Show the Final Result.
- Print the reports, or save them as PDF (chapter 11).
- Close divingBoard 7 with its Close button at the end of the day; the competition and the settings are saved.