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Scoreboard Extension for SPX-GC

PLEASE NOTE: Scoreboard extension **requires SPX-GC version 1.0.11** or newer.

A sports scoreboard extension for SPX-GC from spxgc.com. Extension consists of two parts

- **plugin and extension** which are installed to `ASSETS/plugin/scoreboard` -folder. A **plugin** file adds a 'Scoreboard' launch button to the user interface of SPX-GC which opens the **extension** user interface "popup" for controlling the playout of the Scoreboard graphic.
- **templates** are HTML graphics used via CasparCG or other HTML capable playout system. Scoreboard comes with [template files](#) which can be used as is or can be modified for custom designs and functionality.

User interface of Scoreboard can be optimized for different sports by changing clock type (countdown or countup), enable or disable hour display, and score increase/decrease buttons can be customized.

User interface can be scaled up or down by changing the width of the window and it's default size and on-screen position can be set in [settings.js](#).

Since the Scoreboard extension runs independently it does not require any rundowns to be open or any templates to be triggered from the rundowns. This also enables remote control workflows using a phone or physical controller, such as Stream Deck. See [API commands](#).

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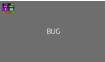


Plugin files

User interface and it's related files are installed to `ASSETS/plugin/scoreboard/` -folder structure.

File	Description
<code>init.js</code>	SPX-GC plugin initialization functions
<code>index.html</code>	A "popup" user interface of the controller. Related assets are in typical subfolders such as <code>js/</code> , <code>img/</code> , <code>css/</code> etc...
<code>settings.js</code>	File for configuring various plugin features, see section settings.js .

Template files

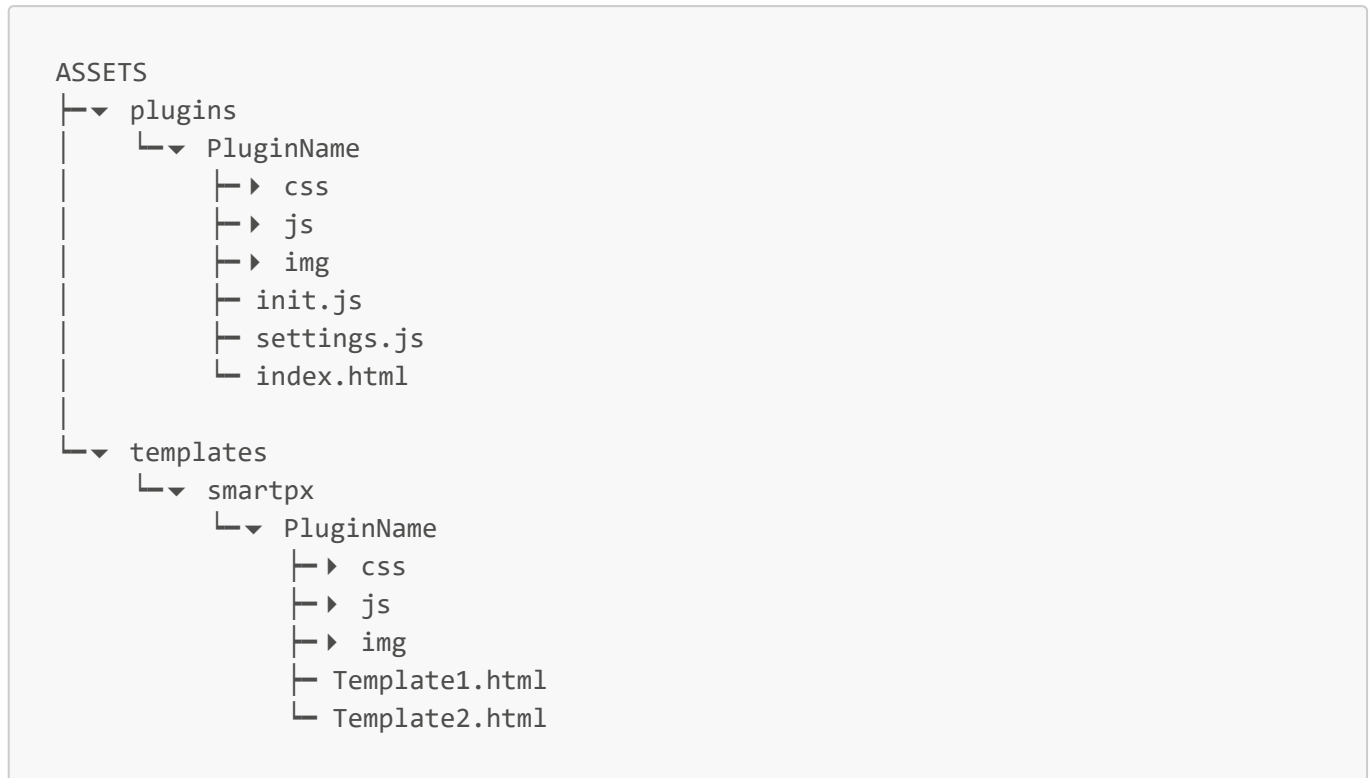
Graphic templates and it's related files are installed to `ASSETS/templates/smartpx/scoreboard/` -folder structure. See section [customization](#)

File	Description	Image
<code>SPXGC_Scoreboard_bug.html</code>	(The default style) A small corner "bug" with (short) team names, scores, clock and three additional features: period display, footer display (for penalties etc) and a function to trigger sponsor logos as bug overlay. The Bug template is the most comprehensive graphic and is production ready as-is. Team logos can be stored to <code>img/logos</code> folder and they will appear one a team by the same name is chosen.	
<code>SPXGC_Scoreboard_strap.html</code>	A horizontal bar across the screen with team names, scores and the clock. Strap is simple but production ready.	
<code>SPXGC_Scoreboard_card.html</code>	A simplified clock and cards layout for team names and scores. This can be used as-is but is primarily provided as a starting point and inspiration for additional development.	
<code>SPXGC_Scoreboard_blanco.html</code>	A barebones skeleton html file with only the core functionality. This can be used as a starting point for developing custom scoreboard graphics	

Installation

Templates and plugins on SPX-GC Store are also available as *an installer* (Windows only) which will extract the required files to their correct positions automatically.

SPX-GC plugins are installed to ASSETS folder-structure following this principle:

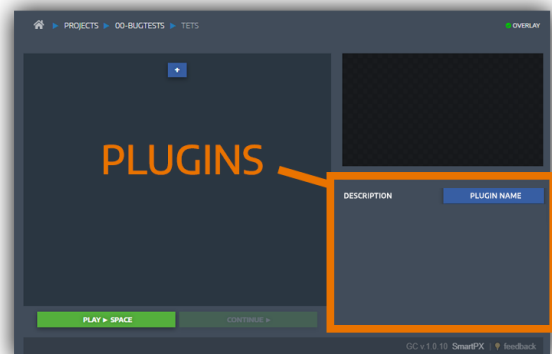


When manually installing files using the above principle as a guide and use **scoreboard** as the **PluginName**.

Open the extension

Once installed successfully the plugin will show up in the plugin area below the preview and plugin can be accessed with the provided control(s). (SPX-GC v 1.0.11 or newer required for this)

- Go into SPX-GC application
- Open (or create) a project
- Open (or create) a rundown
- See the plugin area for available extra functions and plugins



Plugin usage

Scoreboard plugin works "independently" in it's own (popup) window, meaning the graphic template does not need to be added to a rundown or it does not matter which project or rundown is opened in the SPX-GC user interface.

The plugin window size and default position can be set in settings.

The plugin is very easy to use and the user interface should be self explanatory. See section [settings.js](#) for options.

Clock timer runs within the Scoreboard window and it's last *state* is kept in memory along with team names and score values. If the window is reloaded it will return back to it's previous state. Please keep in mind the clock does not run while the plugin window is closed.

Extra functionalities can be added or removed just by modifying the [settings.js](#) -file. Extra values are **not persistent** and are always reset when **play** is executed.

Using Scoreboard on a mobile device

Note, this is an experimental, non-supported use-case. But fun nevertheless 😊

It is possible to control Scoreboard using a mobile phone. The user interface is not developed expecially for this but a modern smartphone with a modern web browser can load up all user interface elements and can control SPX-GGC server and thus control playout of Scoreboard templates. This requires the phone is in the same wifi / network with the server and has access to SPX-GC server:port/url.

settings.js

⚠ **REMEMBER** to make backup copies of original files before making any changes.

Open [settings.js](#) file in a text editor to make changes to the plugin functionality.

After making changes to settings.js please reload the Scoreboard extension (Ctrl + R) and play template IN again.

Setting	Description
popup	Window size and position as top , left , width and height values in pixels
play/stopButtonText	Texts in playout control buttons. Default values are IN and OUT .
template.file	The graphic file's relative path in the SPX-GC's ASSETS/templates -path. Default value is smartpx/scoreboard_rugby/SPXGC_Scoreboard_bug.html . Change the _bug to _strap or _cards to try out another scoreboard layouts.
template.server	Name of playout CasparCG server in SPX-GC config
template.channel	CasparCG playout channel, usually 1

Setting	Description
<code>template.layer</code>	Playout layer, range 1-20
<code>clock.count</code>	Value is either <code>up</code> for increasing clock or <code>down</code> for decreasing countdown clock
<code>clock.hours</code>	If <code>true</code> an hour display is shown and time is displayd in <code>1:05:45</code> format. If <code>false</code> the hours are hidden and display is in format <code>65:45</code> .
<code>teams</code>	A list (array) of names for home team dropdown
<code>allowNegativeDisplay</code>	Default value of <code>false</code> prevents negative numbers in the score (minimum value is 0) but <code>true</code> allows negative score values.
<code>scoreButtons</code>	An array of objects, which specifies how many score buttons are in each team's score button areas. <code>buttonText</code> parameter sets the text shown on the button face and <code>scoreValueChange</code> defines how score value changes when clicked. Change can be positive (green button color) or negative (red button color). Button sizes adjust automatically to cover the whole horizontal space. By default there are 4 buttons (-1, +1, +2, +5), but these can be added or removed as needed.
<code>extras</code>	An (optional) array of objects for additional dropdown controls with a push button to send a command to the template. With <i>extras</i> new functionality can be added to the plugin and templates. Required parameters are <code>title</code> for the name of the extra, <code>templatefunctioncall</code> is the function name implemented into the graphic template and <code>options</code> object array which will be the <code>text</code> of the dropdown and <code>value</code> of each which will be passed as an argument to the target javascript function in the template. See original source files for examples and inspiration.

Template customization

⚠ REMEMBER to make backup copies of original files before making any changes.

Scoreboard solution consists of three parts which need to work in tandem: 1: **Scoreboard UI**, 2: **settings.js** and 3: **the template**. For displaying some additional information, a javascript function and related HTML markup must be developed in the template source code, that needs to be exposed to the user interface with settings.js file for operator to be able execute that function. Text strings for functions are defined in the *extras* of **settings.js** for each function separately.

Please see the HTML, CSS and Javascript source code for options, comments and additional developer information.

Scoreboard extension comes with the following templates with varying designs and functionality.

- SPXGC_Scoreboard_bug.html
- SPXGC_Scoreboard_strap.html
- SPXGC_Scoreboard_card.htm
- SPXGC_Scoreboard_blanco.html

All templates can be started (IN animation), stopped (OUT animation) can display teamnames, score and the clock. Templates has different animations in their IN and OUT animations. Supplied templates also have additional features:

THE BUG -TEMPLATE

Bug (SPXGC_Scoreboard_bug.html) is the default graphic, a small bug at the top-left corner of the screen. Additional functions:

- **Team icons** Template supports the use of small images (PNG 100x100px) in `img/bug_teams` -folder. The name of the team is automatically parsed as the imagefile name. Teamname "dogs" corresponds to an imagefile `img/bug_teams/teambg_dogs.png`. (Space in the teamname is replaced with an underscore). When teamname is changed an animation is triggered to highlight team change. The name of the team is drawn on top of the icon as text.
- **Period number -extra function** When a period option is selected and triggered (with SET button click) a `periodDisplay()` function is called in the template with a string value as it's parameter. The value is drawn into an animated small zone in the top-right corner of the bug and the clock moves to the left "making space" for it. When "period" is taken out (with "-" option) the clock moves back to center position.
- **Penalty -extra function** When a penalty option is selected and triggered (with SET button click) a `footerTextDisplay()` function is called in the template with a string value as it's parameter. The value is drawn into an animated textblock below the bug. Penalty can be taken out (with "-" option). Text strings are defined in the `extras` of `settings.js`, the value is s text string with two fields, delimited with a pipe character (`|`). The first item is a "color name" which the template function recognizes and sets a style class accordingly. The second item of the string will be shown in the textblock.
- **Sponsor -extra function** When a sponspor option is selected and triggered (with SET button click) a `updateSponsorLogo()` function is called in the template with a string value as it's parameter. The value is used to load an image (206x140px PNG) as an overlay covering the bug for a pre-defined duration (5 seconds by default). Sponsor string "beer" corresponds to an imagefile `img/bugsponsor_beer.png`.

Most of CSS styling of the Bug template is defined within the HTML source file.

THE STRAP -TEMPLATE

Strap (SPXGC_Scoreboard_strap.html) is a thin strap at the top of the screen. Additional functions:

- **Sponsor -extra function** When a sponspor option is selected and triggered (with SET button click) a `updateSponsorLogo()` function is called in the template with a string value as it's parameter. The value

is used to load an image (1920x200px PNG) as a background covering the full area. Sponsor string "beer" corresponds to an imagefile `img/strapback_beer.png`. Image can be removed with "-" option.

- **Scoreboard Style -extra function** This extra is commented out in `settings.js` for practise purposes. When the extra is enabled, it will expose a new control in the Scoreboard UI for choosing either a 'full' or 'clock' Strap style which will trigger `scoreboardStyle()` template function which animates strap's width accordingly.

Template uses a `customize.css` stylesheet file for various color and font settings which are exposed as css variables. The names of the variables are descriptive and self explanatory. By increasing the `edge-margin-top` variable, for instance, the graphic can be pushed to the bottom of the frame, as opposed to the top with the default margin of 0px.

All texts are using a CSS text-shadow (by default) to introduce a "neon glow" around texts.

THE CARDS -TEMPLATE

Cards (SPXGC_Scoreboard_cards.html) is a simple example / starter file for creating a fullscreen Scoreboard for venue screens. Besides basic functionality it does not have any extra features implemented.

THE BLANCO -TEMPLATE

Blanco (SPXGC_Scoreboard_blanco.html) is a barebones starter file for developing custom solutions, only providing basic, core functions to IN and OUT animations.

Font and color change

- place a new font file to the `fonts` sub folder
- link font file to the template by modifying CSS font file links

Creative Services

For tailor-made graphic templates or custom workflows please contact info@smartpx.fi

Terms of use

SPX-GC templates and other downloads comes in two variants:

- **FREE** (can be shared and adapted)
- **PREMIUM** (can not be shared)

Depending on your download see the license file either in **LICENSE_FREE.TXT** or **LICENSE_PREMIUM.TXT** file in this same folder.

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