

Pratica

Gara

HW

Archivi

Selezioni

Classifiche

SCALE RACE SUITE

REV. 2.14

Slotcar RC

SRS hardware connections 1

Control platform always powered
SRS controls directly the lane.
If not powered the NC contact allows to use and power the lane.
When SRS is powered, the lane is in full break (NO contact connected to ground) if the race is off.
When the race start the lane is powered and as soon as the time finish the lane is again in full break.

Setup Gara
Preparazione gara

Pratica
Prove libere cronometrate

Qualifiche
turni di qualifiche

Gara
Crea una nuova gara

Piloti
Archivio piloti

Auto
Modelli e parti

Campionati
Archivio gare e campionati

Batteria 1/1 **Manche** 1/4 **Riavvia**
Tempo: 00:05:00 00:00:00 **Status** INO

Classifica Batteria

Pos	Pilota	Giri	Distacco
1	Calaresu Fabrizio	16	+00.000
2	Binda Ivo	16	+00.960
3	Carbone Biagio	14	+2 Laps
4	Avogadro Fabiano	11	+3 Laps

Classifica Parziale @ 05:00

Pos	Pilota	Giri	Distacco
1	Calaresu Fabrizio	16	+00.000
2	Binda Ivo	16	+00.960
3	Carbone Biagio	14	+2 Laps
4	Avogadro Fabiano	11	+3 Laps

Home

www.ibinda.it

SRS – Scale Race Suite

SRS - Scale Rase Suite è una soluzione SW per gare di modellismo in scala, in particolare per:

- Gare Slot car
- Gare MiniZ (da perfezionare)
- Gare Rally RC (da perfezionare)

La suite e' composta da un'interfaccia grafica e da un HW dedicato.

Tuttavia, SRS è anche compatibile con i seguenti HW:

- DS200/DS300
- EASYLAP
- ROBITRONIC

SRS HW e' stato progettato per gestire:

- fino a 8 corsie con alimentazione indipendente per ciascuna di esse (gare slot)
- Interfaccia sensori compatibile con sensori a 5V di segnale
- Falsa partenza
- Un semaforo per la partenza a 5 luci



Le caratteristiche principali di SRS sono:

- Interfaccia grafica moderna
- Multilingue
- Classifiche in tempo reale (anche su batterie finite)
- Modalità qualifica
- Modalità pratica
- Riprendere una gara interrotta (da ultimo rilevamento con SRS HW)
- Database piloti
- Archivio gare con calcolo classifiche
- Risultati gara editabili per ogni singolo giro
- Risultati grafici e statistiche
- Risultati a fine gara pubblicati su web (con registrazione e connessione web)
- Differenti selezioni per la partenza
- Differenti selezioni per la fine gara
- Voce selezionabile e lettura automatica del best
- Rotazioni piloti
- Aggiunta e rimozione dei piloti ad ogni cambio batteria
- Caricamento griglie da csv,xlsx, gare precedenti
- Funzioni di simulazione:
 - Consumo e rifornimento
 - Consumo gomme
 - Danni

SRS – Scale Race Suite

Questo documento costituisce il manuale di SRS – Scale race Suite contenente le informazioni base su come utilizzare il sistema.

Il file installer esegue l'installazione del SW e di tutte le sue componenti permettendo all'utente di selezionare la cartella di installazione.

A fine installazione potrebbe essere conveniente non far eseguire direttamente il SW.

Cliccare sull'icona di **SRS.exe**

Se si sta facendo un aggiornamento a una nuova versione SRS chiede se si vuole aggiornare i file di settaggio.

Questo perché vecchie versioni potrebbero non avere compatibilità nei file di configurazione

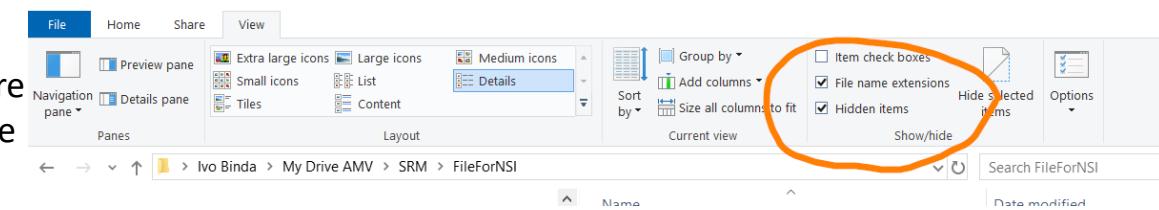
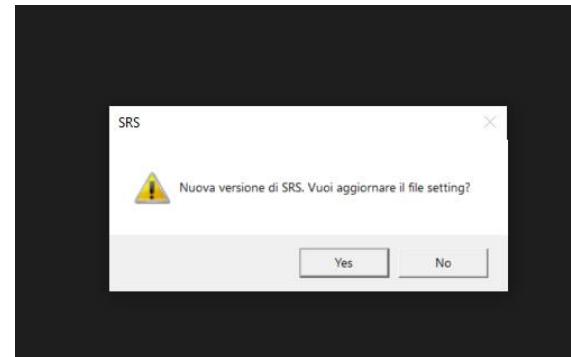
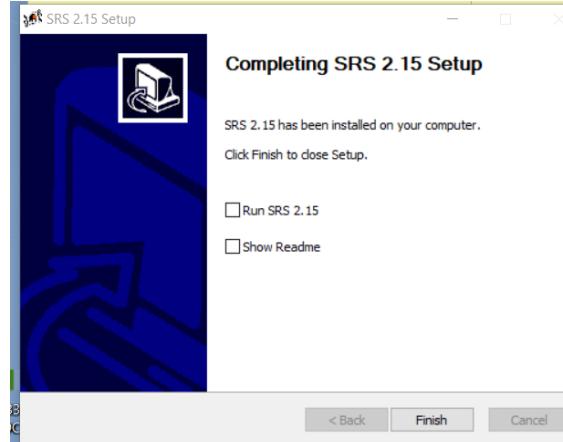
Se si accetta i settaggi verranno persi e dovranno essere riconfigurati.

Le informazioni dell'accesso FTP saranno conservative.

Se non si accetta di aggiornare il file setting, il SW potrebbe avere malfunzionamenti e a quel punto bisogna intervenire manualmente rimuovendo i file dalla cartella roaming.

C:\Users\user\AppData\Roaming\SRS			
Name	Date modified	Type	Size
Log	4/18/2025 12:21	File folder	
Race	2/21/2025 14:19	File folder	
Resources	2/21/2025 14:19	File folder	
Cars.xml	12/14/2024 20:15	XML File	2 KB
Driver.xml	12/19/2024 17:57	XML File	1 KB
regKey.xml	3/24/2025 21:05	XML File	1 KB
Setting.bkp	4/18/2025 11:43	BKP File	5 KB
Setting.xml	4/18/2025 11:56	XML File	5 KB
usersSRS.txt	12/19/2024 17:53	TXT File	1 KB

Per accedere alla cartella roaming/SRS devono essere attivate le cartelle nascoste

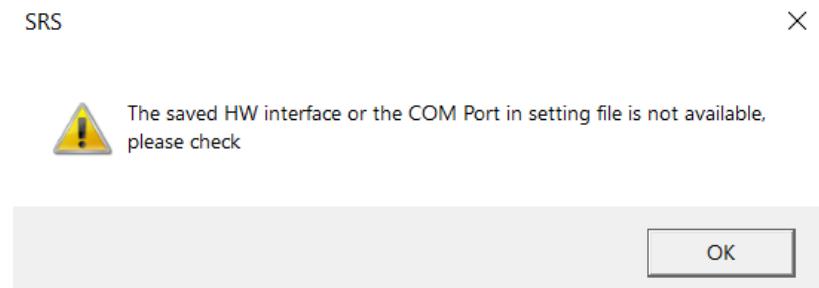


SRS – Scale Race Suite

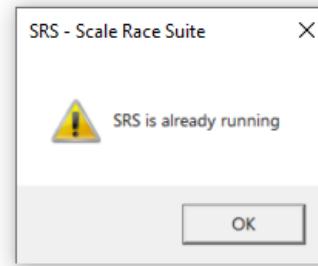
Se tutto è installato correttamente SRS parte mostrando la schermata di Intro

I due pulsanti di accesso diventeranno blu non appena l'HW e la licenza sono verificati.

Alla prima accensione o se ci sono errori di comunicazione con le porte COM appare una finestra informando che la connessione non puo' essere stabilita.



Se si tenta di avviare una seconda volta il SW mentre è in esecuzione appare una finestra di segnalazione:



- Il pulsante slotcar e' per iniziare una gara Slot car
- Il pulsante RC e' per le gare di modelli RC

SRS – Home panel

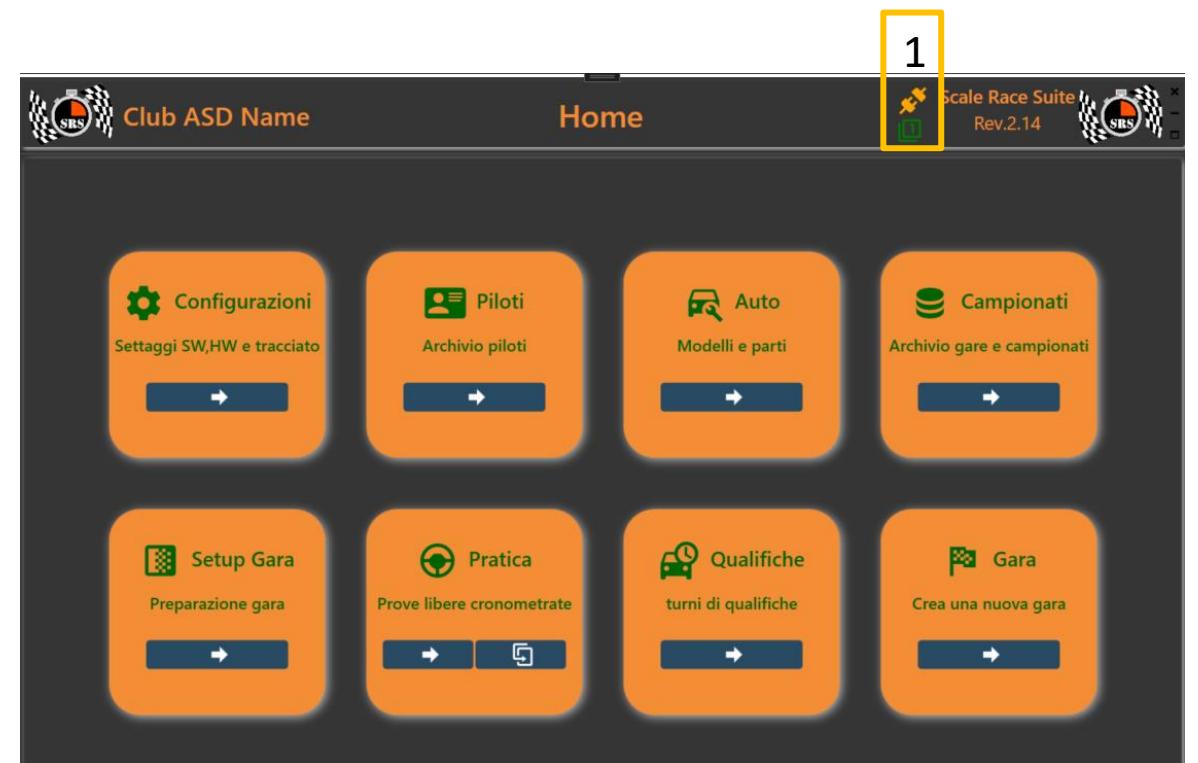
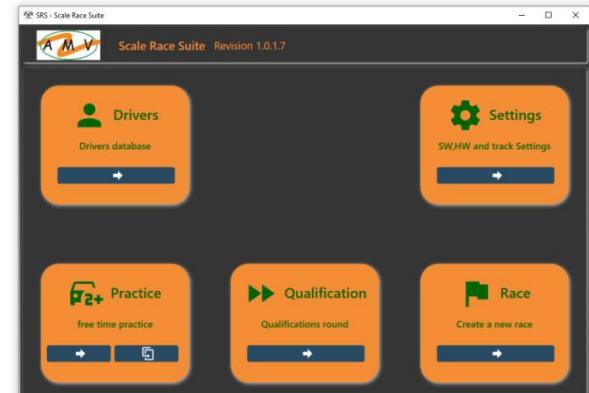
Una volta selezionato il tipo di gara si ha accesso al menù principale.

Se la versione di SRS è registrata, si ha accesso a tutte le funzionalità inclusi archivio campionati e il salvataggio online via ftp con pagina web dedicata.

Se la versione non e' registrata si ha accesso a un sottoinsieme di funzioni

Nel menù principale (Home) si può selezionare:

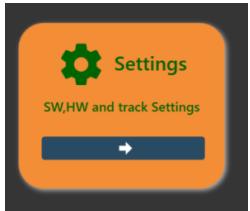
- **Settings:** il pannello di configurazione principale di HW, SW, tracciati, cartelle
- **Drivers:** il pannello per l'inserimento dei piloti e di tutti i dati relativi.
- **Car:** pannello per inserimento specifiche macchien motori produttori.
- **Championship:** pannello per rivedere gare campionati e prove libere.
- **Race Setup:** pannello per la preparazione di una gara
- **Practice:** pannello per le prove libere.
- **Qualification:** pannello per le qualifiche.
- **Race:** pannello per la gara.



Dalla versione 2.1 le due icone nella barra superiore (1) rappresentano lo stato di connessione dell'HW e quanti HW sono connessi.

Con il DS la spina è arancione se la COM è connessa.

Con SRS_HW sarà verde mentre con SRS_AUX sarà blu



SRS – Setting panel

Il pannello di configurazione e' organizzato a tab relative ai diversi ambiti di configurazione.

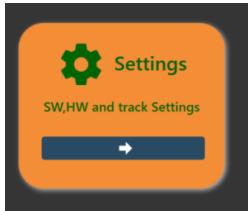
I Tab sono:

- **General**: configurazioni generali.
- **Race and Storage**: configurazioni categorie archivi connessione FTP.
- **Graphic**: grafica da utilizzare per i vari pannelli
- **DS-X00**: pannello configurazione interfaccia. Varia a seconda dell'interfaccia selezionata
- **Simulation**: configurazione della parte di simulazione
- **Register SRS**: registrazione di SRS.

Salva e chiudi sono sempre disponibili.

- Salva(1) salva le impostazioni sul file Setting.xml
- Chiudi(2) chiude la finestra senza scrivere il file ma mantiene i cambiamenti apportati
- Salva e chiudi salva il file e ritorna al pannello principale





SRS – Setting panel

Il pannello Generale serve per le impostazioni complessive.

Nel sottogruppo sistema si seleziona:

- La lingua del SW
- La voce e la velocità per leggere tempi durante la gara.
 - Se la voce non è selezionata non vengono letti i tempi
- Il tipo di interfaccia hardware
- Il percorso dove verranno salvati i database dei piloti e delle auto.
 - NOTA: una volta selezionato un percorso diverso da quello base (riportato in 1) i file drivers.xml, Cars.xml dovranno la prima volta essere copiati manualmente nel nuovo percorso
 - NOTA2: nel caso di problemi irreversibili del SW legato a configurazioni errate o mancanti, rimuovendo la cartella SRS indicata da (1) al riavvio successivo SRS ripristina le cartelle e il suo settaggio iniziale.

Il sottogruppo Pratica imposta i parametri per la pratica/prove libere. Le rotazioni automatiche sono disponibili solo con un HW dedicato non con DS

Lo stesso vale per il sottogruppo gara e qualifiche in cui si impostano tempi rotazioni base e modalità di partenza e di arrivo

The screenshot shows the 'Configurazioni' (Configurations) window of the Scale Race Suite software. The top bar includes the SRS logo, the title 'Club ASD Name', the version 'Rev.2.14', and tabs for 'Generale', 'Gare e Archivio', 'Grafica', 'DS-x00', 'Simulazione', and 'Registrazione SRS'. The 'Generale' tab is active. The main area contains several configuration sections:

- Sistema:** Includes fields for 'Lingua' (Italiano-(it)), 'Voce' (Microsoft Zira Desktop - en-US), 'Ritmo 0-10' (set to 2), and a 'TEST' button. A note below says '(Alcune modifiche apportate verranno applicate al prossimo avvio)'.
- Interfaccia HW:** Shows 'Selezione HW' set to 'DSx00' with a dropdown and a small icon.
- Cartelle:** Shows 'Indirizzo database piloti' set to 'C:\Users\...\Piloti' with a 'Browse...' button. A yellow box highlights this field with the number '1' next to it. Below it is another field 'Altri File: C:\Users\...\AppData\Roaming\SRS'.
- Tracciato:** Includes 'Numero corsie' (4), 'Colori' (L1 yellow, L2 red, L3 green, L4 blue), and 'Settori' (121).
- Lap Beep duration**, **Best Lap Beep duration**, and **Countdown Beep duration** sliders.
- Parametri Pratica:** Includes 'Durata pratica' (20), 'Pausa Rot. Autom.' (0), 'Dur. Rot. Autom.' (0), 'Turni (max)' (100), 'Giri per miglior Seq' (5), and a checkbox for 'Alimenta pista in rotazioni Pratica'.
- Parametri Qualifiche - Gara:** Includes 'Durata qualifiche' (60).
- Rotazione:** Radio buttons for 'Lineare' and 'Alternata', with '1-2-3-4' selected.
- Modo Partenza:** Radio buttons for 'Falsa partenza', 'Prima del traguardo', and 'Dopo il traguardo', with 'Finire al traguardo (no settori)' checked.

At the bottom are 'Save' and 'Chiudi' (Close) buttons.

SRS – Pannello Gara



Quando si apre il pannello gara e' vuoto.

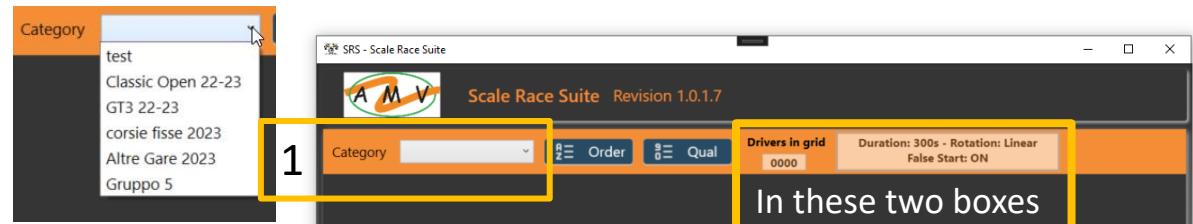
La prima cosa da fare e' selezionare la categoria/tipo (1) di gara che si va a preparare. Dal menu' si sceglie la categoria (le categorie sono create nella schermata di configurazione).

Fatto questo compare la lista piloti e i bottoni per aggiungerne di nuovi(2).

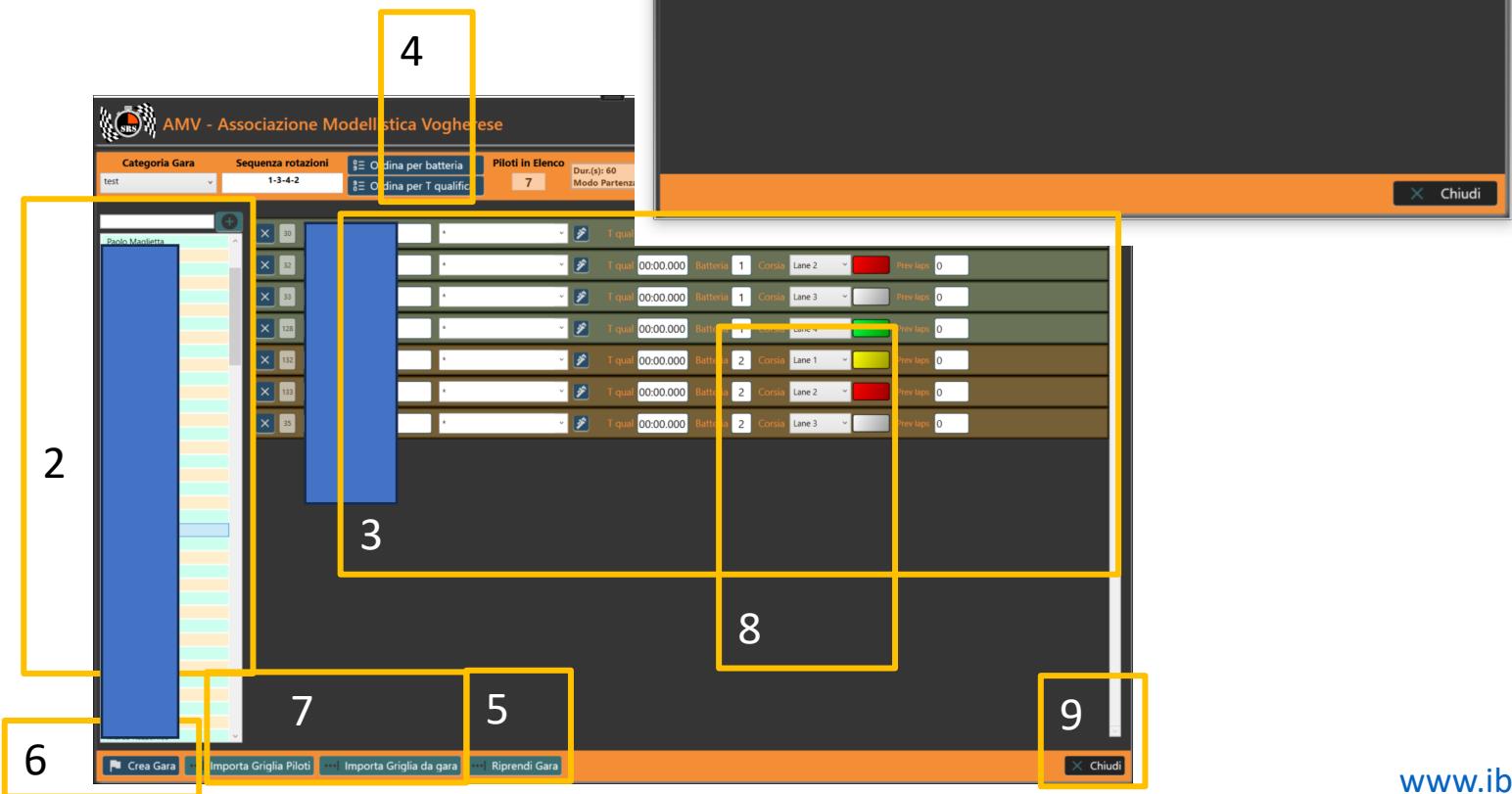
Facendo doppio click sul pilota verrà inserito nella lista dei partenti a destra (3).

Da qui si impostano numero di batteria (la 1 e' la prima a partire), la corsia di partenza tramite le caselle (8).

Si puo' rimuovere il pilota dalla lista con il tasto X



In these two boxes you have details on the HW setting for the race and the drivers in grid



Ordina (4) I bottoni sono usati per ordinare la lista in base ai tempi di qualifica o all'ordine batterie a corsia. Pigiando piu' volte il bottone si inverte l'ordine.

Create (6) Quando tutto e' pronto si procede con questo bottone per creare la gara e passare al pannello gara.

Importa griglia (7) se esiste un elenco piloti (griglia di partenza) gia' pronta o se si vuole usare la griglia di una gara precedente, questi due bottoni permettono di farlo

Riprendi gara (5) permette di ricaricare e riprendere una gara interrotta

Chiudi(8) esce dal pannello



SRS – Setup Gara

Una gara può anche essere preventivamente creata tramite il pannello setup gara.

Questo permette di creare la griglia di partenza con rispettive batterie e corsie.

La vista è identica al pannello di preparazione gara a parte alcuni dettagli tra cui la possibilità di dare un nome al file piloti che verrà generato(1)

Importa griglia (2) come nel pannello gara, permette di importare una griglia già esistente per modificarla o correggerla.

Il file deve essere uno dei tipi riconosciuti (3) e formattati come richiede SRS:

- File.xml generato da SRS
- File Excel con formattazione come da esempio nel file zip di installazione
- File .csv con formattazione come da generazione classifica

Può essere anche importata direttamente la griglia da una gara precedente.

Selezionando il file «FINAL_xxxxx» di una gara precedente viene letta la griglia di piloti

The screenshot shows the SRS software interface. At the top, there are several tabs: 'Sequenza rotazioni' (Sequence of rotations) set to '1-3-4-2', 'Ordina per batteria' (Sort by battery), 'Piloti in Elenco' (Drivers in list), 'Dur.(s): 60' (Duration: 60 seconds), and 'Modo Partenza: Falsa partenza' (Starting mode: False start). Below this is a list of drivers: Fabiano Avogadro, Biagio Carbone, Fabrizio Calaresu, Ivo Bindia, Giuseppe Castiglione, Federico Fradiacomo, Giorgio Brenna, Alessandro Ventimiglia, Paolo Maglietta, Fortunato Persico, Andrea Dellaqua, Fabrizio Castellini, Francesco Cabiati, Franco Mufalli, Gustavo Pastorino, Giorgio Repetto, Lorenzo Gattelli, Carlo Barbano, Michele Cirstea, Matteo Palanti, Marco Bertagna, Andrea Marinoni, Stefano Lavazza, Michele Botticella, 1 AMV, 2 AMV, and AeG Corse. In the center, there is a dialog box titled 'Importa Griglia Piloti'. It contains two buttons: 'Importa Griglia Piloti' (highlighted with a yellow box and labeled 2) and 'Importa Griglia da gara' (highlighted with a yellow box and labeled 3). Below these buttons is a dropdown menu showing 'Files (*.xml;*.csv;*.xlsx)' and two buttons: 'Open' and 'Cancel'. The bottom of the screen features a navigation bar with buttons: 'Crea Gara', 'Importa Griglia Piloti', 'Importa Griglia da gara', and 'Riprendi Gara'. A timestamp '2025_04_26_14_10_25' and a 'Chiudi' (Close) button are also visible.

SRS – Race panel



Race Panel

1 SRS - Scale Race Suite

Time: 00:00:20

POSITION

1 Avogadri Fabiano

CATEGORY test

Totale **11**

Media **25.649**

Distacco **+2 Laps**

2 Carbone Biagio

Calaresu Fabrizio

Lane 3

Time

Laps

Miglior T 00.000
Media 18.676
Miglior seq. (5) 00.000
Outliers 3

3 da Ivo

Best 01.429

CATEGORY test

Totale **16**

Best 01.243

Giri **16**

Media **17.745**

Distacco **+00.000**

4 POSITION

Best 01.341

CATEGORY test

Totale **16**

Best 01.341

Giri **16**

Media **17.805**

Distacco **+00.960**

Batteria 1/1 Manche 1/4 Riavvia

Tempo: 00:05:00 00:00:00 Status END

Classifica Batteria

Pos	Pilota	Giri	Distacco
1	Calaresu Fabrizio	16	+00.000
2	Binda Ivo	16	+00.960
3	Carbone Biagio	14	+2 Laps
4	Avogadri Fabiano	11	+3 Laps

Classifica Parziale @ 05:00

Pos	Pilota	Giri	Distacco	Batt.
1	Calaresu Fabrizio	16	+00.000	1 - 3
2	Binda Ivo	16	+00.960	1 - 4
3	Carbone Biagio	14	+2 Laps	1 - 2
4	Avogadri Fabiano	11	+3 Laps	1 - 1

Last Lap Delay Lap Total Proj Endu Rank Delay

00:00.000 0 - 00:00.000

00:00.000 0 - 00:00.000

00:00.000 0 - 00:00.000

00:00.000 0 - 00:00.000

00:00.000 0 - 00:00.000

00:00.000 0 - 00:00.000

00:00.000 0 - 00:00.000

Manche 1/4 WaitDS More + Add Lap Close

SRS - SCALE RACE SUITE 1.2.15 AMV - Associazione Modellistica Vogherese

www.ibinda.it

SRS – Scale Race Suite

SRS - Scale Rase Suite is a solution for scale model race, in particular:

- Slot car race
- MiniZ race (to be completed)
- Rally RC race (to be completed)

The suite consists of a graphic user interface and a dedicated HW.

Nevertheless, SRS SW is also compatible with:

- DS200/DS300 for slot car race
- EASYLAP
- ROBITRONIC

SRS HW has been designed to manage:

- up to 8 lanes with independent power for each of them for slot race
- Up to 2 independent stage in rally races for slotcar or RC
- False start
- Starting semaphore
- IR interface compatible with standard DS IR bridge

Key features of SRS, especially for slot car race are:

- Modern graphic interface
- Multilanguage
- Real time Rank across different manches
- Qualification session
- Practice session
- Recover an interrupted race
- Driver database
- Race database with rank calculation
- Race results editable in any single lap and time
- Graphic and statistical view of results
- Online results publishing at the end of the race (if connection available)
- Multiple start race mode
- Multiple end race mode
- Best lap time spelling from selectable voice
- Driver rotation
- Possibility to add/remove drivers at any manche changes
- Full race editing.
- Simulation features
 - Fuel usage and refill
 - Tires consumption
 - Damages



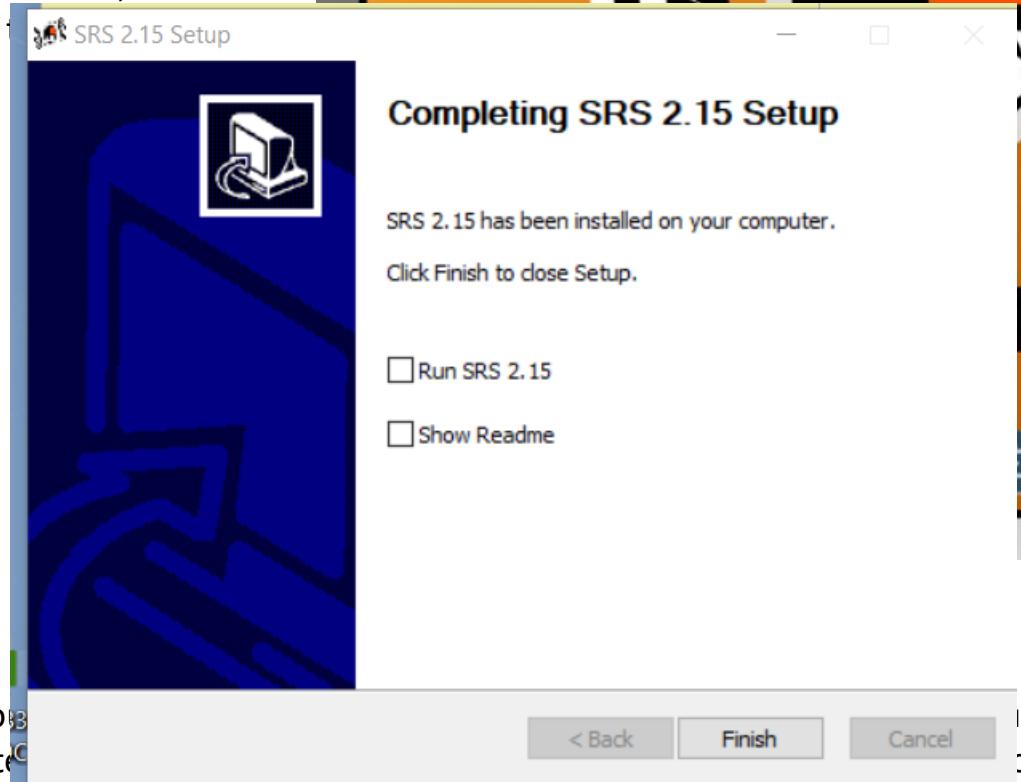
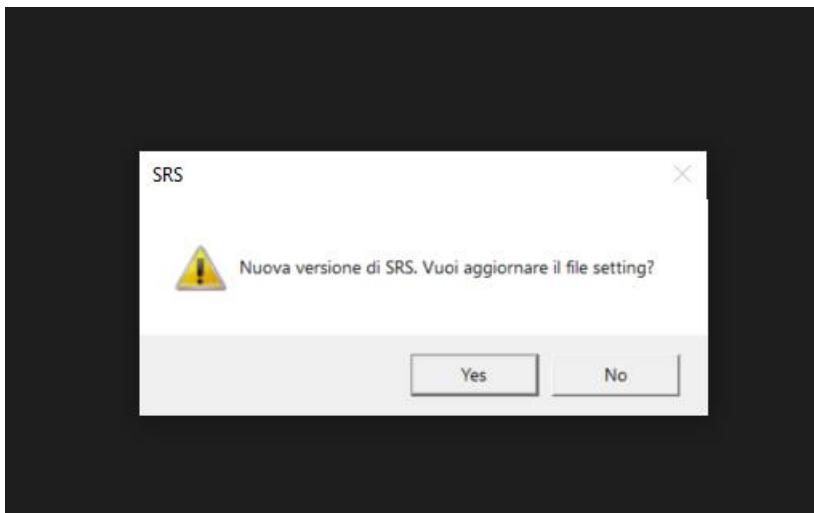
SRS – Scale Race Suite

This document represents the SRS- Scale Rase Suite manual with all the basic information on how to use the suite.

Let's starts.

Double click on **SRS.exe**

If you are installing a new version, not compatible with previous, a message can pop up asking if you want to update or not the file



If you accept you will lose the previous settings and you
accept, SRS could not start, and you should be requested
in windows

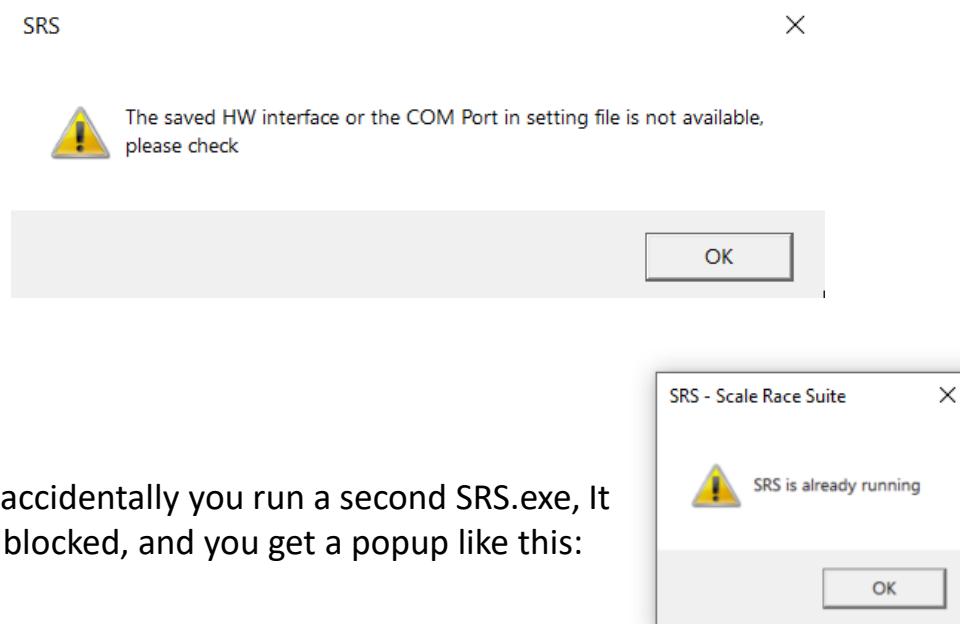


I don't
our user

SRS – Scale Race Suite

If all is fine, the suite will start with the Intro screen
The two buttons will become blue when the HW is
detected and ready.

If it is the first time you run **SRS** or some HW error
(communication) occurs, a popup will appear informing
the COM port is not available (below picture)



If accidentally you run a second SRS.exe, It
is blocked, and you get a popup like this:



- Slotcar button prepare the suite for slot car racing
- RC prepare the suite for Radio control racing

SRS – Home panel

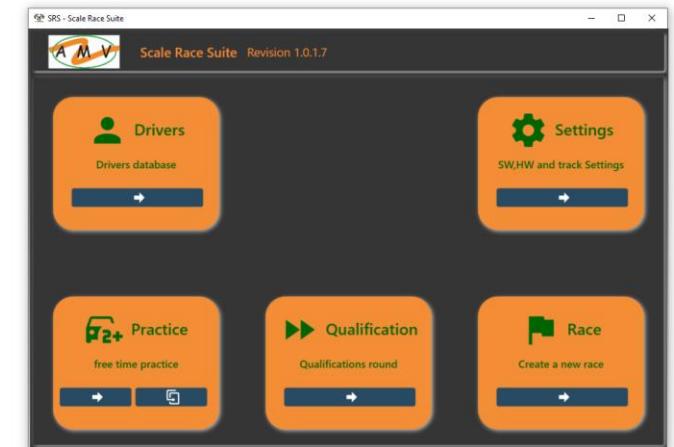
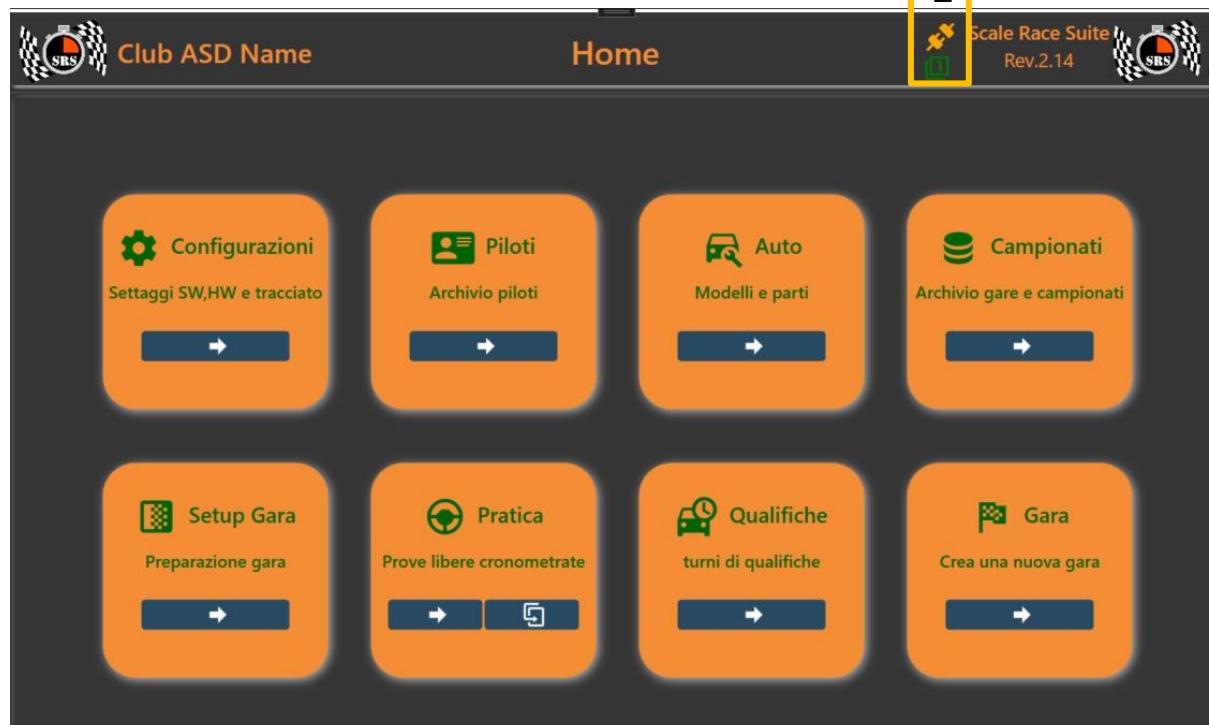
When a race type is selected you enter in the main menu.

If you have **registered SRS**, then you have the full features including championship database and on-line race saving.

If you have a nonregistered version, you can access to all the features apart the championship and on-line storage.

In the main panel you can select:

- **Drivers**: this panel allow you to enter and manage all the details of the drivers.
- **Championship**: in this panel you can see the different championship ranks, single race, race performances.
- **Settings**: the panel containing the settings for track, interface and registration
- **Practice**: the panel to manage the practice sessions.
- **Qualification**: entering this panel you can start the qualification session for your race.
- **Race**: the panel to setup the race (drivers and sessions) and start it.



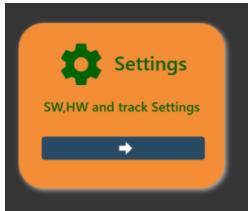
1

From SRS rev 2.1 two icons in the title bar (1) indicates the status of the connection with the HW and how many HW are connected

With DS it will be orange if the comm is open. Run a practice session to check if connection is well established.

With SRS_AUX will be blue

With SRS_HW green



SRS – Setting panel

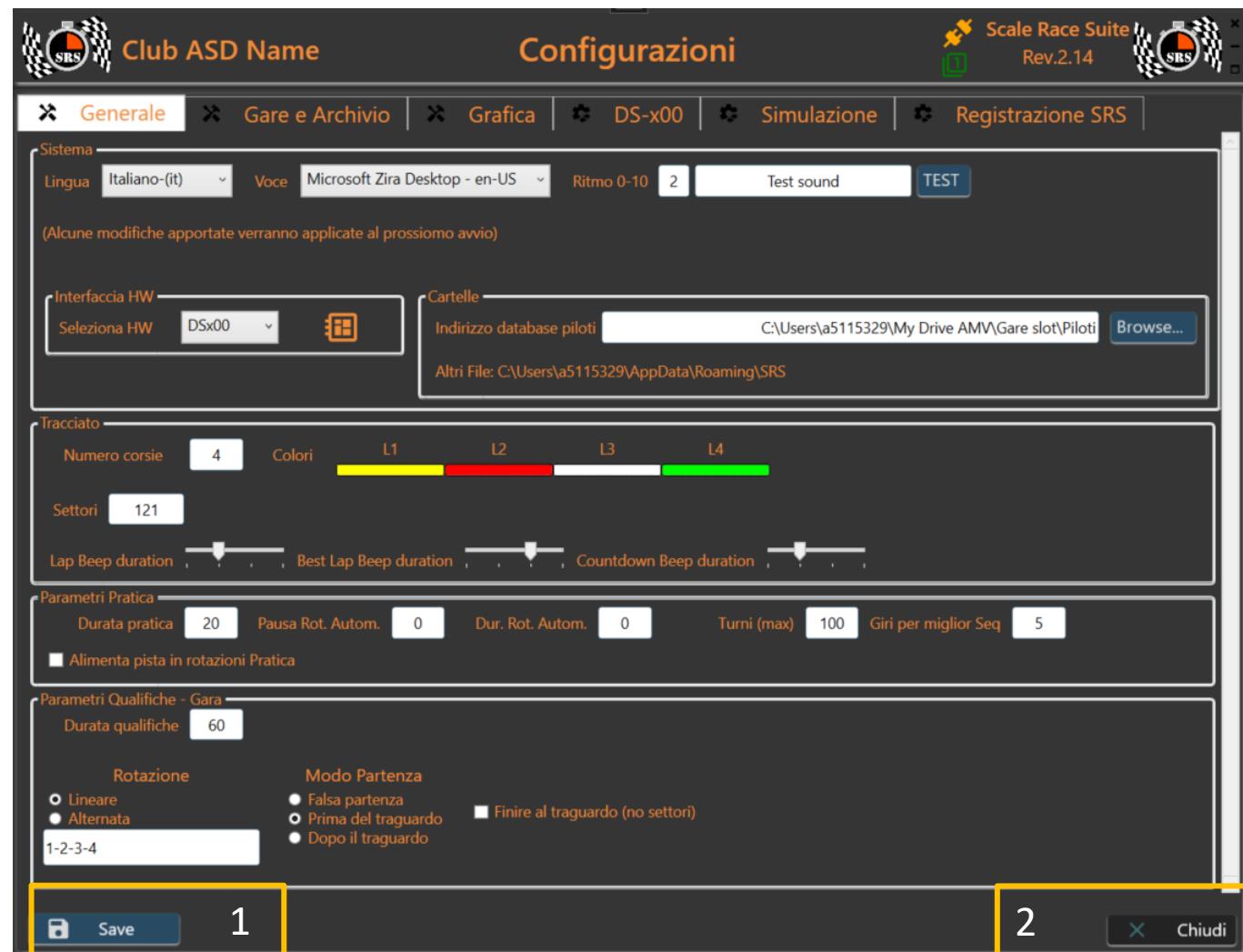
Setting panel is organized in tab related to the different parts of the configuration.

Tabs are:

- **General**: system, track and race parameter setting.
- **Race and Storage**: configuration of categories, points, on-line storage and local storage.
- **Graphic**: configuration of some graphic/aspects
- **DS-X00**: this tab changes accordingly to the selected interface and allow the setting of that HW interface (SRS HW, DS300 or similar, EasyLap counter ...).
- **Simulation**: configuration for fuel and tires consumption and damages.
- **Register SRS**: registration information of the software.

Save and Close Button are available in any tab.

- Save button (1) save the parameters of all the tabs in the settings.xml file
- Close button (2) do not save in the file and returns in the main window
- Press Save and then Close to save and return to the main panel

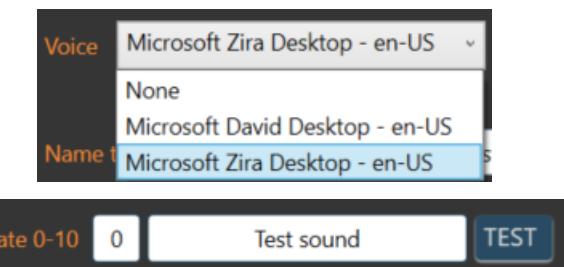
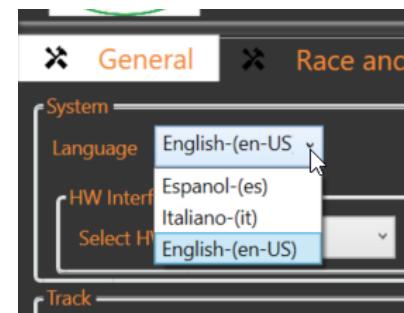
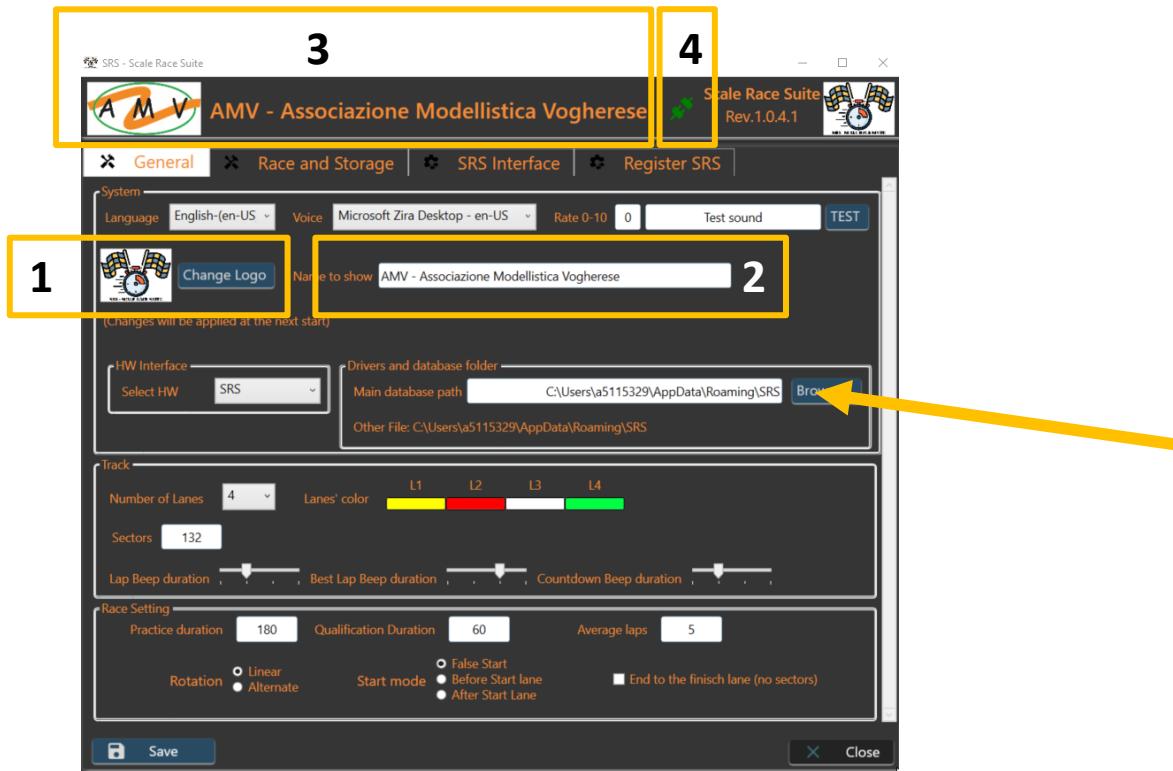


SRS – Setting panel – General Tab

System group

In this group you can select:

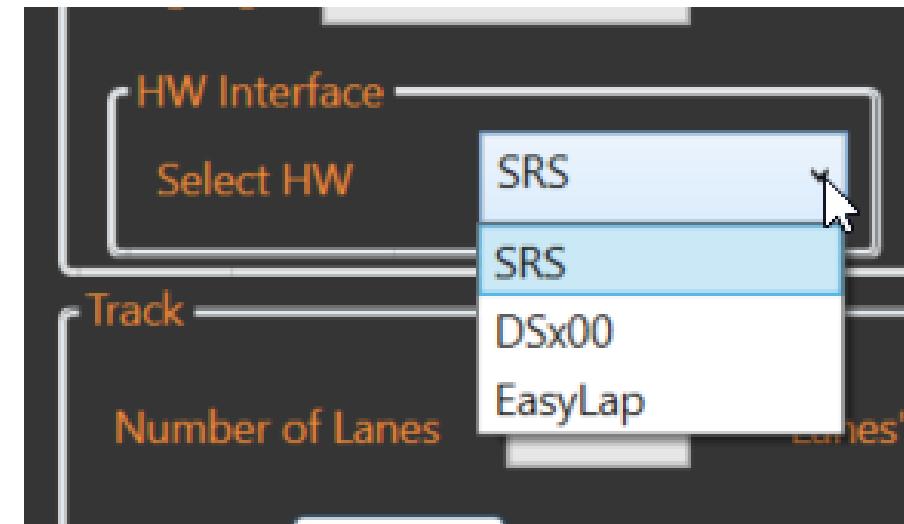
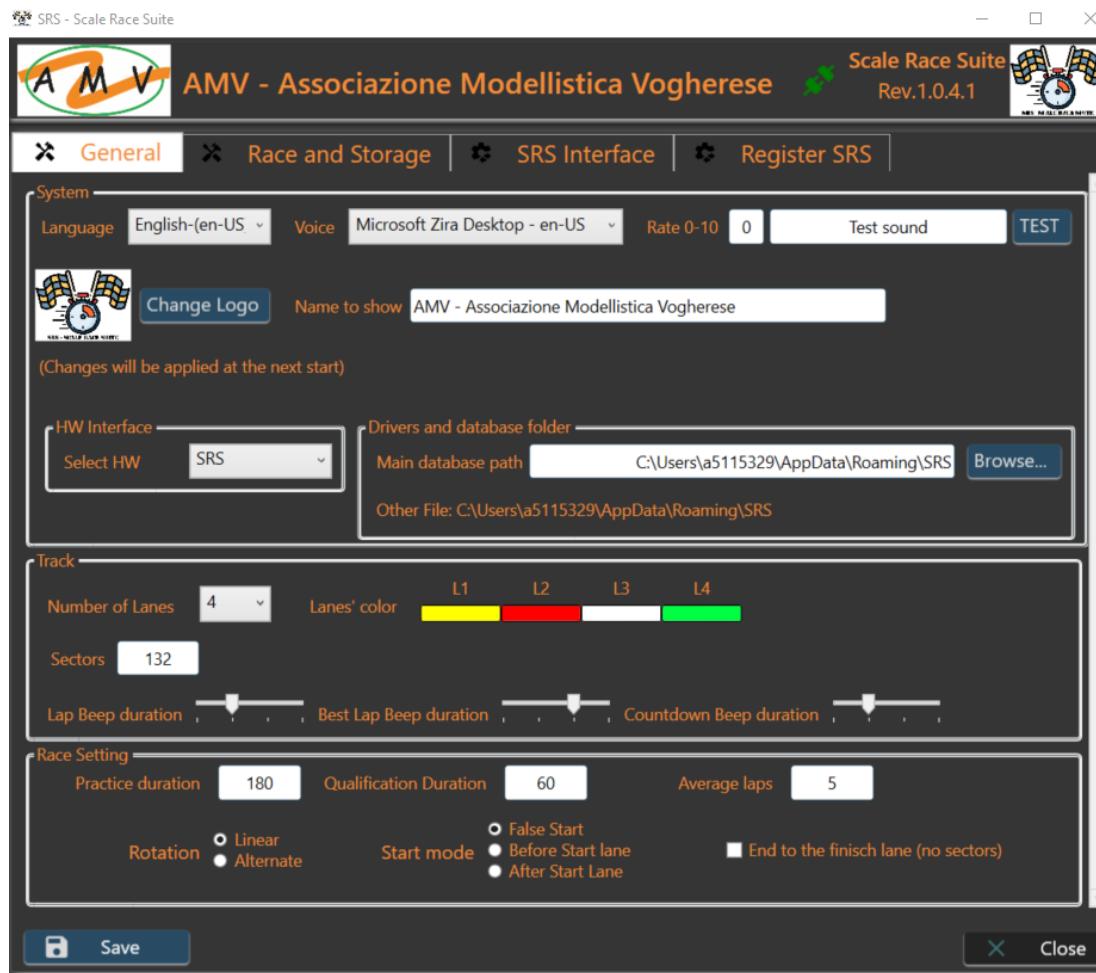
- Language: English and Italian are ready. Espanol in progress.
- Voice and rate: used to read best time during the race. Leave voice empty for not using the feature.
- Team Logo and Name (1 and 2): can be changed with any logo and description, Update will be applied at the next start
 - Will be shown in the title bar (3)
- Connection Status: indicate if the communication is properly established with the HW (green) or not (red) (4)



Drivers Database Folder is used to select the folder for the driver.xml file and in the future other dedicated file.
Default folder is under `Users\your name\AppData\Roaming\SRS`.
With the brows button you can select the folder you want.

SRS – Setting panel – General Tab

- HW interface: here you can select all the available and managed HW the SRS can use.
 - SRS** is the dedicated HW able to manage single lanes, false start, semaphore and other in the future,
 - DSx00** is the famous and well known and used for slot racing DS200/DS300. In this case SRS is mainly a viewer but useful to manage sessions and manches
 - Easy Lap** is dedicated to RC car where active IR tag are used on the car

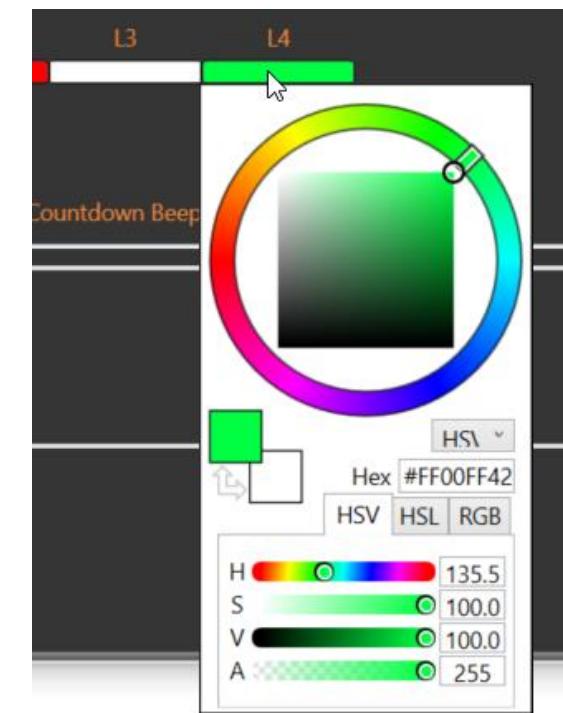
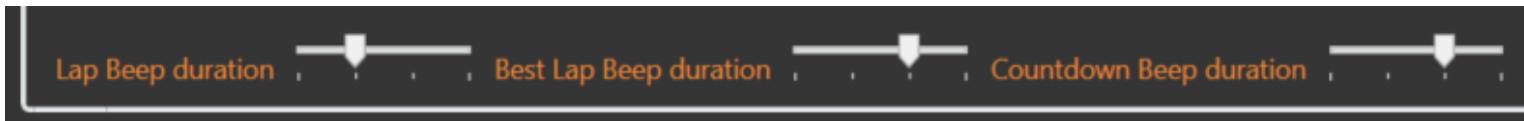


SRS – Setting panel – General Tab

Track group

In this group you can select:

- Numbers of lanes: From 2 to any.
- Sectors: you must enter the number of sector of your track. It is used to check later if some wrong number is inserted at the end of the race
- Lanes color: once selected the number of lanes you must select the dedicated color accordingly to your track.
 - Clicking on the color the color panel will appear allowing you to select your preference.
- Beep bars: this allow you to disable or enable with 3 different durations the beeps during the race
 - Lap Beep: happens at any lap when the car cross the start
 - Best Lap: happens any time a driver has a new personal best
 - Countdown: to make the start (especially false start) more realistic, the beep can be removed

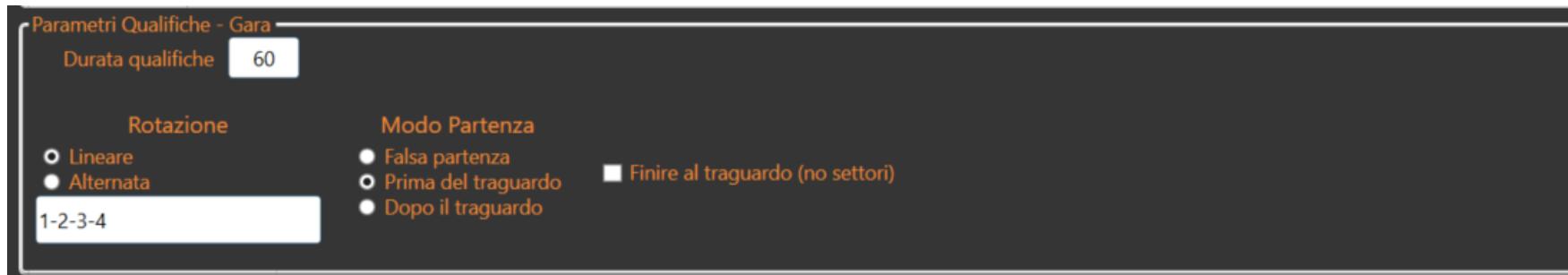


SRS – Setting panel – General Tab

Race setting group

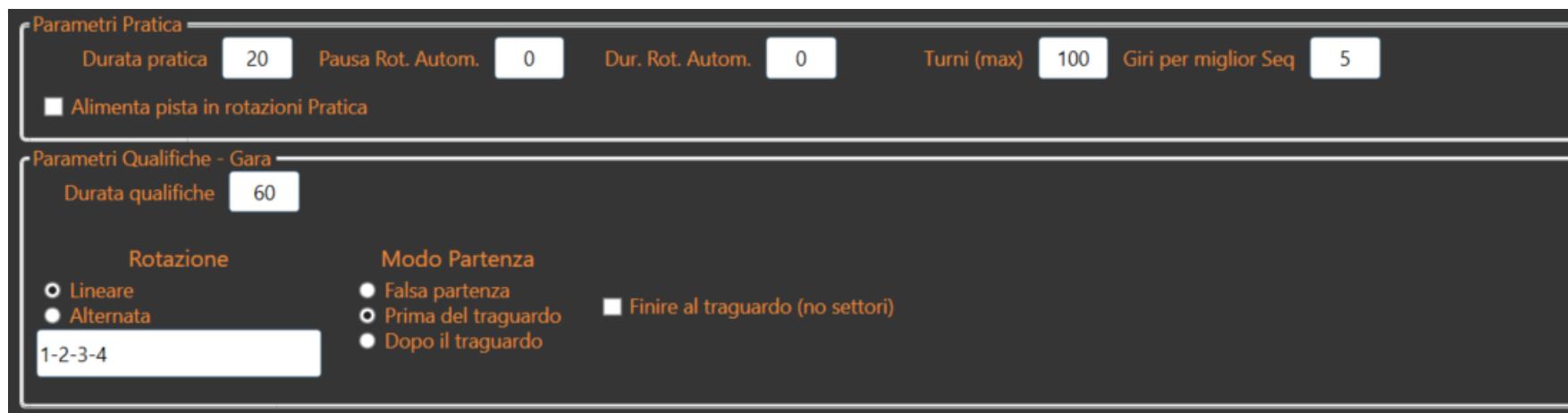
In this group you can select:

- **Qualification Duration:** also in this case in seconds, it represent the duration of a qualification section for each driver.
- **Rotation:** represents the lanes rotation for all the races:
 - Linear: means shift on one side. Example on 8 lanes: 1-2-3-4-5-6-7-8-1....
 - Alternate: means even/odd rotation. Example; 1-3-5-7-8-6-4-2-1....
- **Start Mode**
 - **False start:** ONLY WITH SRS HW. Checking the box lanes are powered and if the driver starts before the semaphore is off the power is removed for an amount of time defined in SRS interface setting.
 - With False start **enabled** the car must be placed **BEFORE** the start gate.
 - With False start **disabled** the car must be placed **AFTER** the start gate.
 - Before start Lane: skip the first trigger, counted as reaction time.
 - After Start Lane: the first trigger is counted as lap



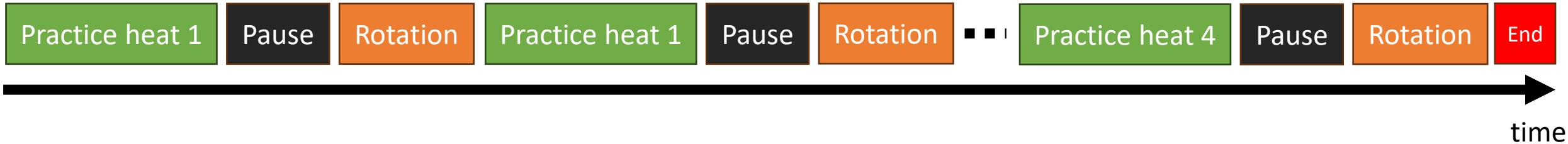
SRS – Setting panel – General Tab

- **Average Laps:** in the Practice session this will be used to calculate an average of consecutive number of laps equal to the defined number.
- **End Mode**
 - When checked, the race will not end at the elapsed time, but a bell will ring indicating the driver should still reach the finish line.
 - In this mode it is not needed to take in count the sectors, but the rank will be established by the total Laps + arrival time to the finish lane.



SRS – Setting panel – General Tab

- **Practice setting allows to make single or multiple practice turns with automatic rotations**
- **Duration** is the practice round duration
- **Pause** is the delay before to start the rotation
- **Rotation duration** is the time to change the lane, powered for drive the car back or unpowered based on the checkbox, with countdown the last 4 seconds
- **Heat number** represent the maximum heat before to stop the rotations
- **Best sequence** represents the best consecutive laps to take in count during BS plotting



SRS – Setting panel – Race and Storage Tab

FTP configuration group

If you have a registered version, you will receive an encrypted User and Password to access to the indicated ftp.

You need to select a name that will represent the remote folder and menu on the webpage <https://www.ibinda.it/racedb/race.php>

Screenshot on the left represent the race panel view.

The screenshot shows the Scale Race Suite software interface. The window title is "SRS - Scale Race Suite" and the version is "Scale Race Suite Revision 1.0.1.7". The active tab is "Race and Storage".

FTP configuration:

- FTP Host Address: `ftp://ftp.ibinda.it/ibinda.it`
- FTP User: `albj/BRoUmijD7pJ4nSy0Eldcpm0P5kM`
- FTP Password: `Ctnohir6gVHlre83tcnXiQzn390/euka`
- Club name for remote folder: `AMV`

Categories:

- Categories list:
 - Cat. name: test
 - Classic Open 22-23
 - GT3 22-23
 - corsie fisse 2023
 - Altre Gare 2023
 - Gruppo 5
- Add button
- Remove button

Championship setting:

- Points: `25-20-17-15-14-13-12-11-10-9-8-7-6-5-4-3-2-1`
- race to scrap: `2`

Buttons:

- Save button
- Close button

Race database - SRS - Scale Race S

SRS - SCALE RACE

Left sidebar (Race database - SRS - Scale Race S):

- HOME
- AMV
 - + 2022
 - + 2023
 - + 3h_Endurance
 - + Classic Open
 - + GT3
 - + test
 - + ASD nome lungo che piu lungo non si puo per vedere come diventa
 - + ASD3

SRS – Setting panel – Race and Storage Tab

Categories group

The **browse button (1)** and the folder shown are used to select and show the local folder where the races results will be stored.

Not only the results and a copy of the HTML page will be stored in a sub folder in the selected path, but also temporary files and different results formats.

They can be used to restore a race in case of interruption.

Cat. Name is used to type a new category/championship name and with the Add button it will be listed in the below box.

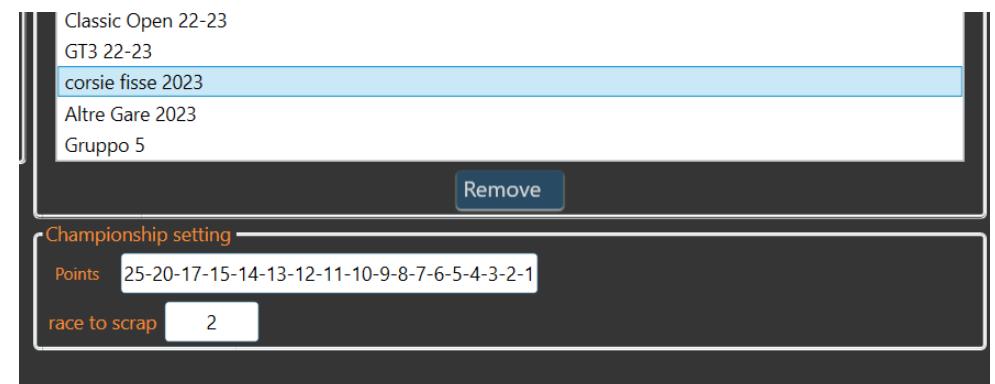
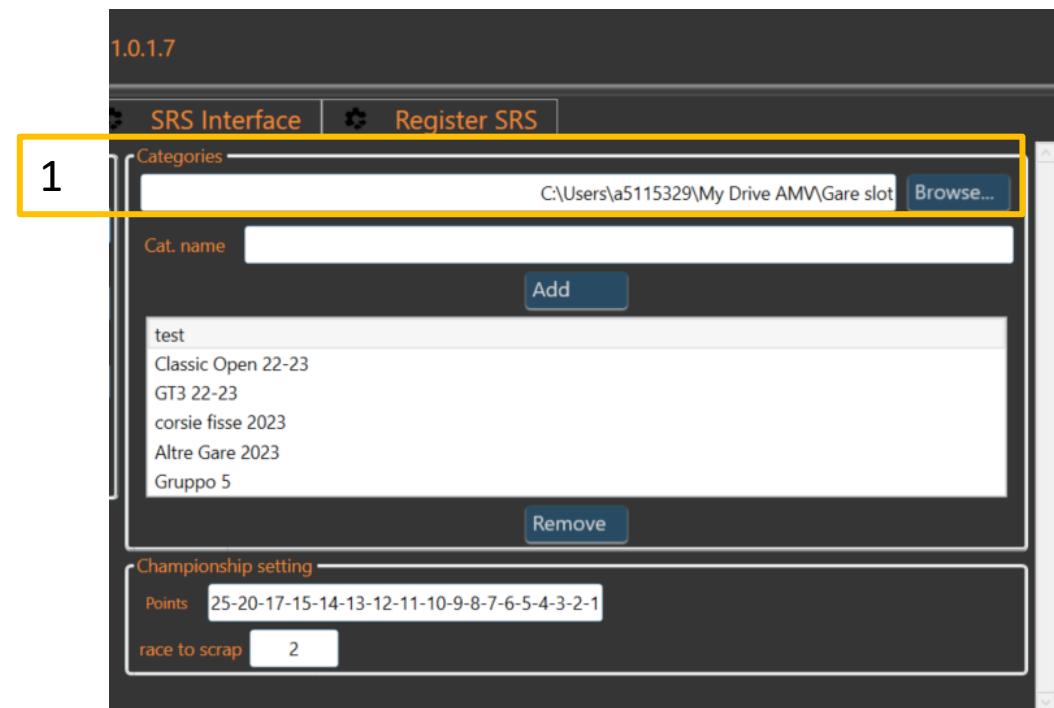
When a new category is added, you can click on it, and you will be able to change the points and scrap race for that category and rank.

When you have selected a category, you can also **remove** it from the list. It will be removed only from the selectable list, no delete of folders or races.

Championship setting group

Points are the points assigned from the 1st to the last. The format is mandatory as shown with a “-” separator between the numbers. The last point (1 in the example) will be assigned to all the remaining drivers. If you want a 0 points is assigned to all the others, you need to add “-0”.

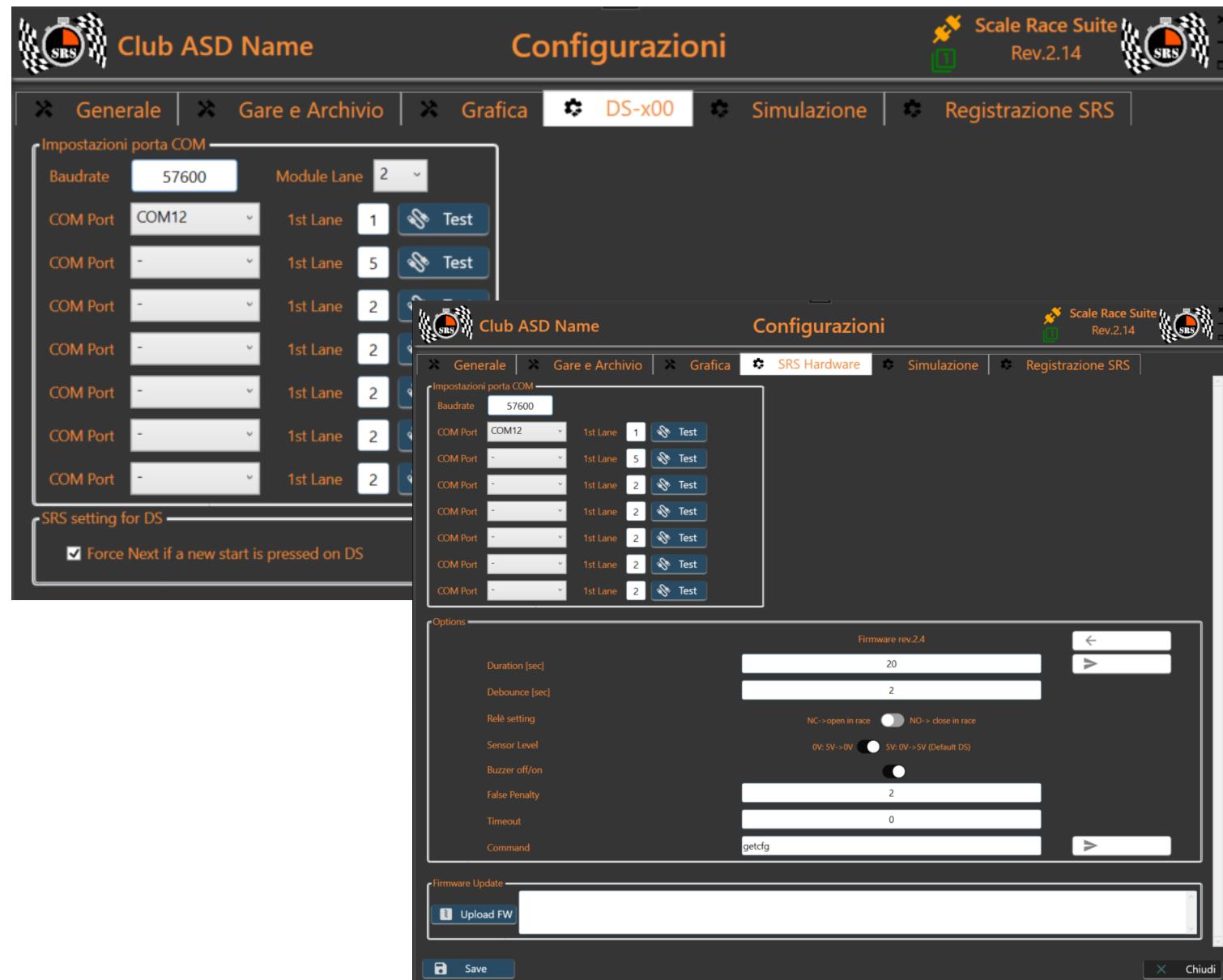
Race to scrap are, in a championship, the number of race to not consider for a general rank, discarding the worst results for each driver. In the example the 2 worst results will be discarded.



SRS – hardware interface Tab

When you select an HW interface in the General tab, the interface tab will be shown accordingly.

- **Easy Lap** tab doesn't have setting.
- **DS-x00 (DS300/DS200) tab** allows to set the COM port number and the baud rate that should be 57600 on new version 3800 on old. I figured out that time to time 55000 is more stable than 54000.
 - **SRS setting for DS group** has a checkbox that allow automatically to detect a new start has pressed on the DS and in this case, SRS moves automatically to the next manches. If the box is not checked, and a new start is detected SRS will not move forward and pop-up an alert. In this case you must stop the DS, **press next on SRS** and then you can press start on DS.
- **SRS interface** tab is the tab dedicated to the setup of the SRS HW. Other than the COM port selection and the baud rate (it must be 115200), you can configure all the system (details in the next page).



SRS – hardware interface Tab

Options group of SRS interface

This group is used to configure the SRS HW. Parameters in this group are read from the HW (Read HW button) and stored in the HW (Send all).

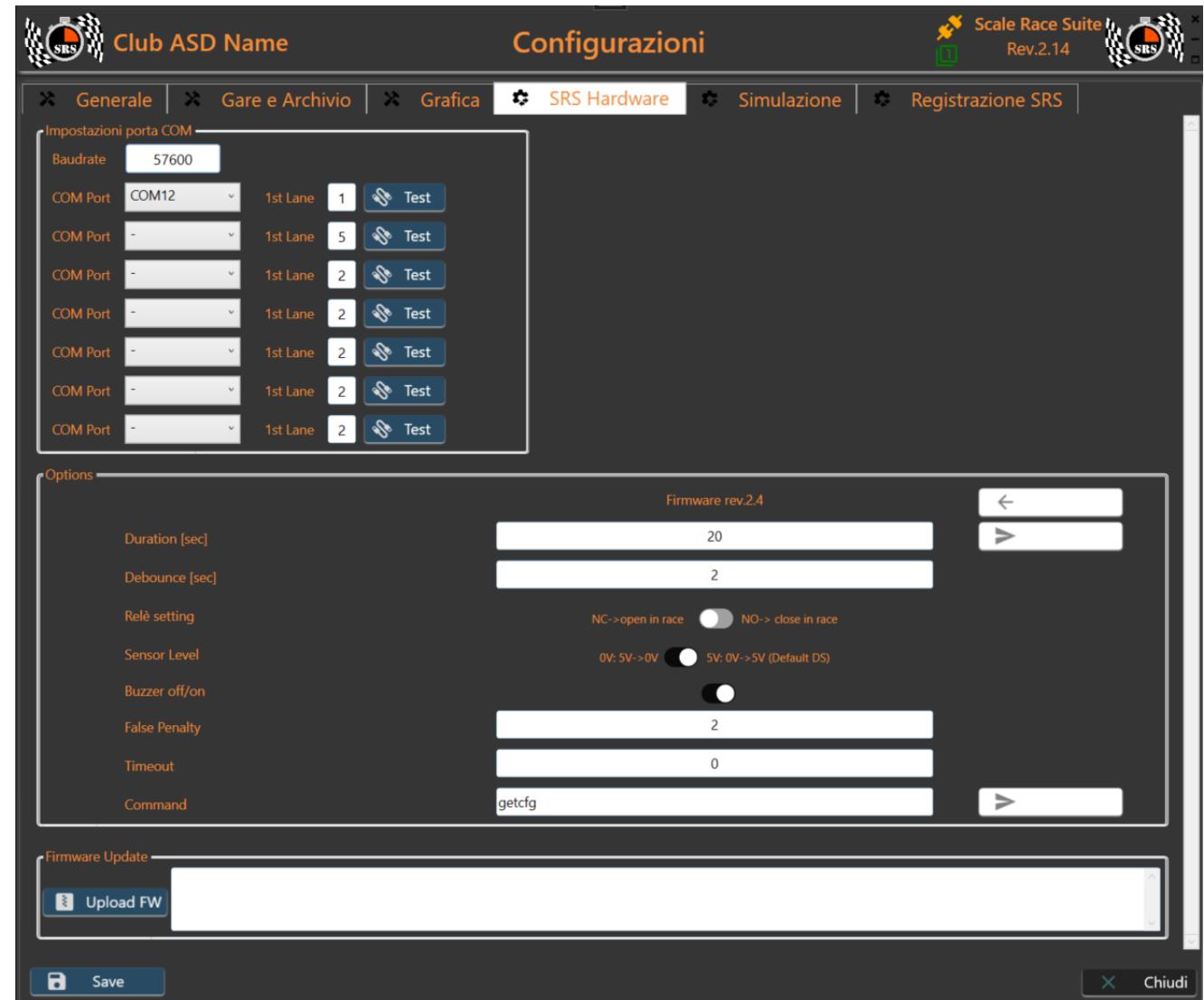
Firmware rev represent the HW/FW version.

Parameters:

- **Duration**: in seconds represent the time before a stop. When time elapses lanes power will be turned off
- **Debounce**: minimum lap time. Any detection below this time will not be counted
- **Rele Setting**: NC/NO are the two possible settings. It depends on your HW connection, but the suggestion is to use the rele' off during the race time and on during the pause.
- **Sensor Level**: you can connect any kind of sensor with output 0-5V. With this selection you can define if the car is indicated with 0V or 5V. Standard SRS LED barrier is low.
- **Buzzer off/on**: you can turn off the buzzer sound to make the race more realistic.
- **False penalty**: time in second when a false start is triggered. In the example the power will be removed for 2sec.
- **Timeout**: time in second to wait in case of "end to finish lane"

Firmware update group

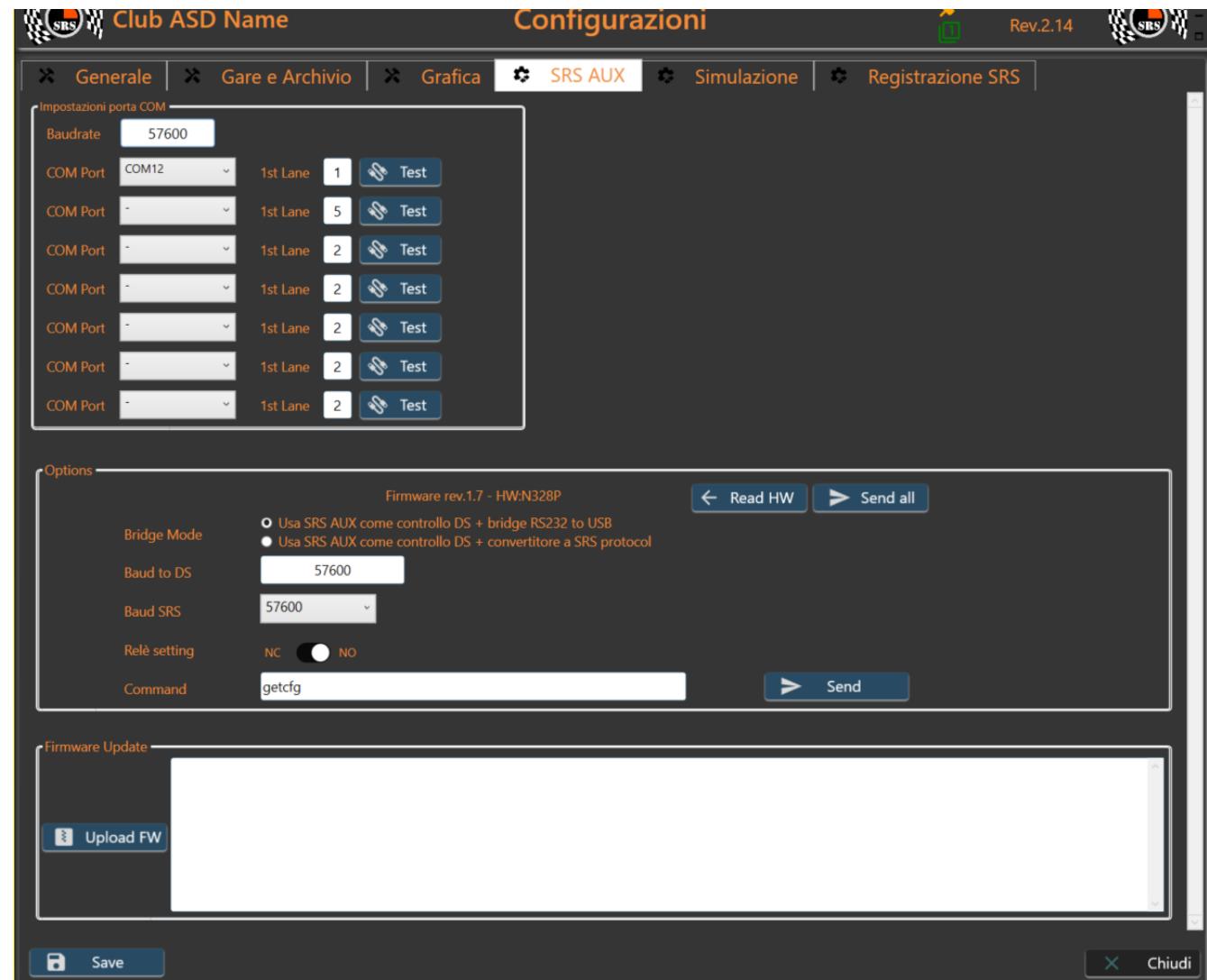
Pressing the **Upgrade FW** button, you will select the new *.hex file for the SRS HW. When selected SRS will pop-up a confirmation window because the process is not reversible. You will see the progress and the result in the blank box on the side. When the upgrade is completed, it is suggested to restart the HW (power-off/power-on) and restart the suite.



SRS – Auxiliary hardware interface Tab

Use SRS AUX group

This group is used to select if an SRS_AUX Hardware is available.
If SRS_AUX is not connected, keep the checkbox disabled



Firmware update group

Pressing the **Upgrade FW** button, you will select the new *.enc file for the SRS HW. When selected SRS will pop-up a confirmation window because the process is not reversible. You will see the progress and the result in the blank box on the side. When the upgrade is completed, it is suggested to restart the HW (power-off/power-on) and restart the suite.

SRS – Simulation Tab

Simulation

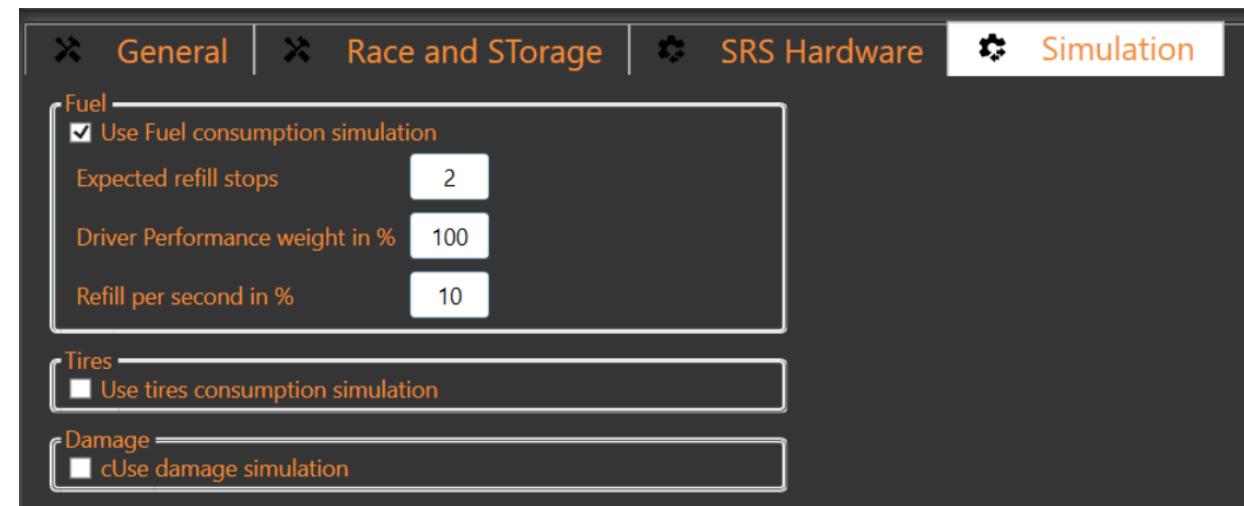
This Tab allows user to simulate real race situations like refill and fuel consumption, tires consumption and random damages.

Fuel and tires consumption is based on the driver performance. It means the variable used to estimate the consumption is the lap time of the driver.

For damages ?????????????????????????????e

In details:

- **Use fuel:** by checking it, the simulation is activated
- **Expected refill stops:** Set the expected number of refill per race. It will be increased/decreased by the single driver performance and the other settings
- **Driver Performance weight %:** This is the weight applied to the single driver performance (lap time) to estimate the fuel consumption. If 100% the performance is counted entirely for the consumption. If 0% the single driver performance is not taken in count.
- **Refill per second %:** The amount of refill for each second (time unit for refill) for each second you stay in the “pitlane”
- **Use tires:** by checking it, the simulation is activated
- **B.**
- **Use damage:** by checking it, the simulation is activated



Fuel Consumption simulation

It is based on the single driver performance. Fast driver consumption is higher than slow driver.

To avoid to enter specific parameters related to the kind of race, car model and other, an average lap time is calculated based on the average lap time of any driver in the race. This is the “threshold” parameter to establish how much to increase/decrease the consumption.

If refill per race is set to 1 and weight to 0, it means that any driver running will complete the race without refill. If refill is 3 and weight 0, again the amount of refill will be 3 for each drivers

If refill is 3 and weight is 100% (worst case), the amount of refill will be adjusted based on the distance of the single driver time from the Threshold.

A fast driver could need to have 4 refill meanwhile a slow driver only 2

SRS – Simulation Tab

Simulation

Media gara = media di tutti i giri dei piloti.

La media gara si abbassa a mano a mano che i veloci corrono.

Delta = media – giro pilota

→ pilota lento → Delta negativo

→ pilota veloce → Delta positivo

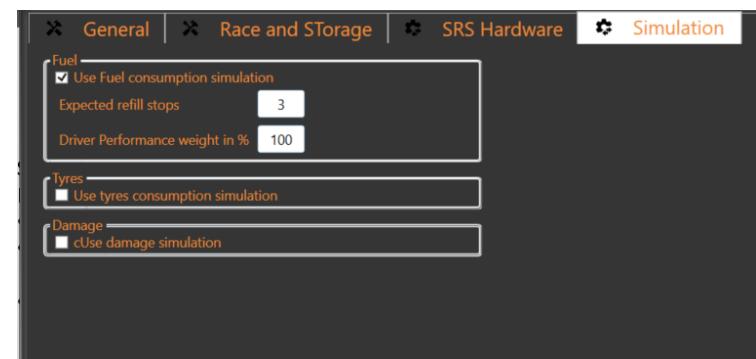
Consumo/giro in tempo = **Media gara** + (**Delta * peso Driver**)

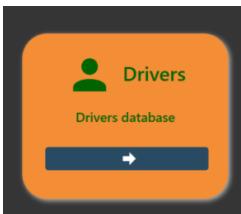
→ il pilota lento ha un consumo per giro minore della media (delta negativo)

→ il pilota veloce ha un consumo per giro Maggiore della media (delta positivo)

Consumo/giro in percentuale = **consumo in tempo** / (**durataGara** *10) * **FuelPerRace** (il *10 e' per esprimere la durata in millisecondi) (100% : durataGara in ms = x : consumo/g in t (ms)) mentre FuelPerRace e' per scalarlo sui rifornimenti richiesti

Residuo serbatoio % = residuo precedente % – consumo/g %





SRS – Drivers panel

Drivers panel is used to manage the Drivers database used for the races and championship database.

The folder containing the file is configured in the setting.

- Clear button (1) cleans all the entry fields in Driver Data group
- Add/Update button (2) save the changes, or the new driver edited in Driver Data
- Remove button(3) remove the driver from the list.

Any add/update/remove action is automatically saved, and a backup file is generated (only one backup copy)

Close Button (4) returns to the Home panel.

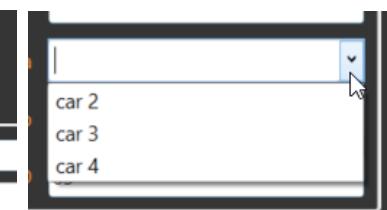
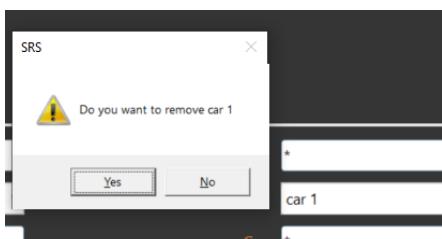
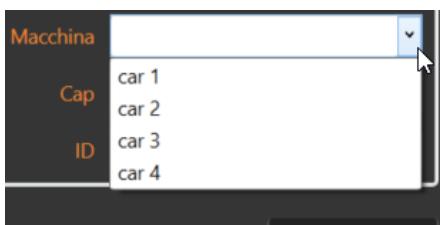
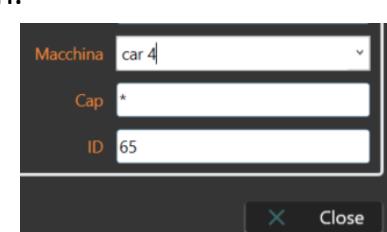
How to add/remove cars and Tag:

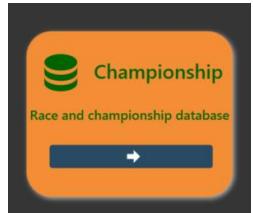
In the corresponding box (Car or Tag) type the new car/tag you want enter. Then press enter. The car/ tag will be added to the list.

To remove a car/tag, select the car/tag to remove and press enter, a popup will appear for confirmation.

REMEMBER: press add/update to make the change permanent, otherwise you will lose them

The screenshot shows the 'Drivers database' section of the Scale Race Suite application. The main area displays a table of driver information with various columns like ID, First Name, Family Name, and Team. Below this is a detailed 'Driver Data' input form with fields for each of these details. At the bottom of the form are four buttons: 'Clear', 'Add/Update', 'Remove', and 'Close'. Each of these buttons is highlighted with a yellow box and a number (1, 2, 3, or 4) indicating its function.



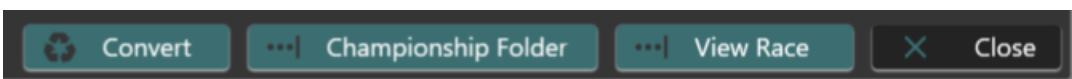
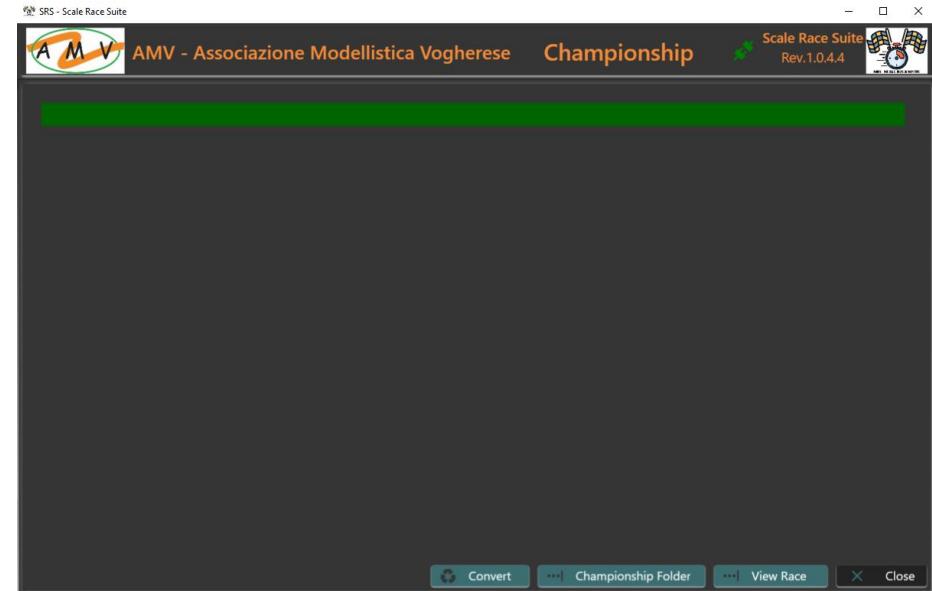


SRS – Championship panel

Championship panel allows to edit races, import some race databases review championship ranking.

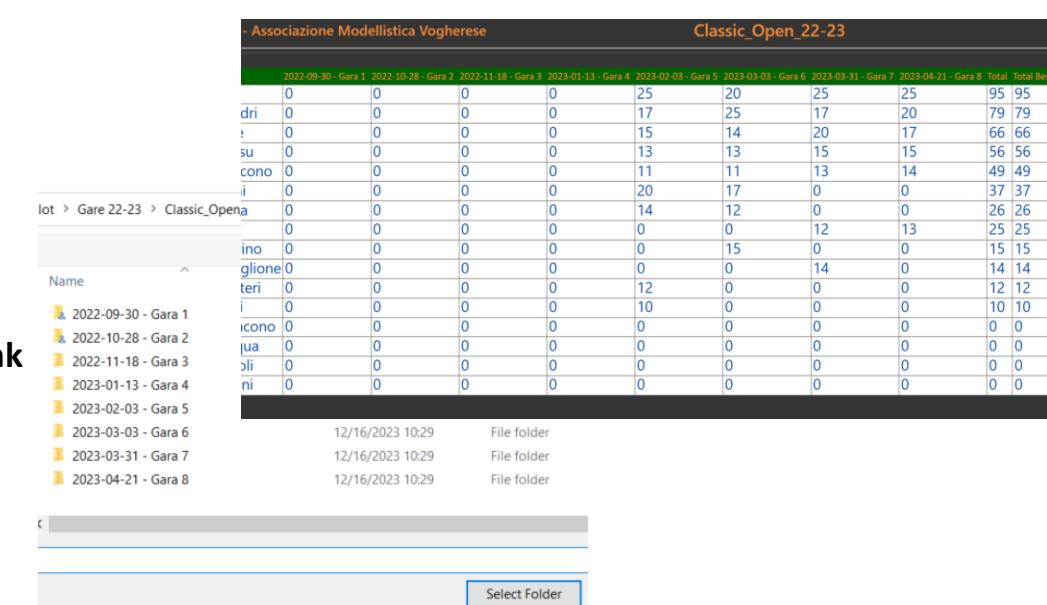
This button is available only in a registered version of the SW.

- **Convert Button** allows to import some text file in a compatible xml format
- **Championship folder** allows to select a folder where the subfolders are the different race of one or multiple championship and generates a rank
- **View race** allows to open a FINAL_xxxxxxx.xml race result file to review and edit the content.
- Close returns to the Home

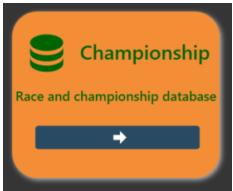


View Race

View championship Rank



SRS – Championship panel

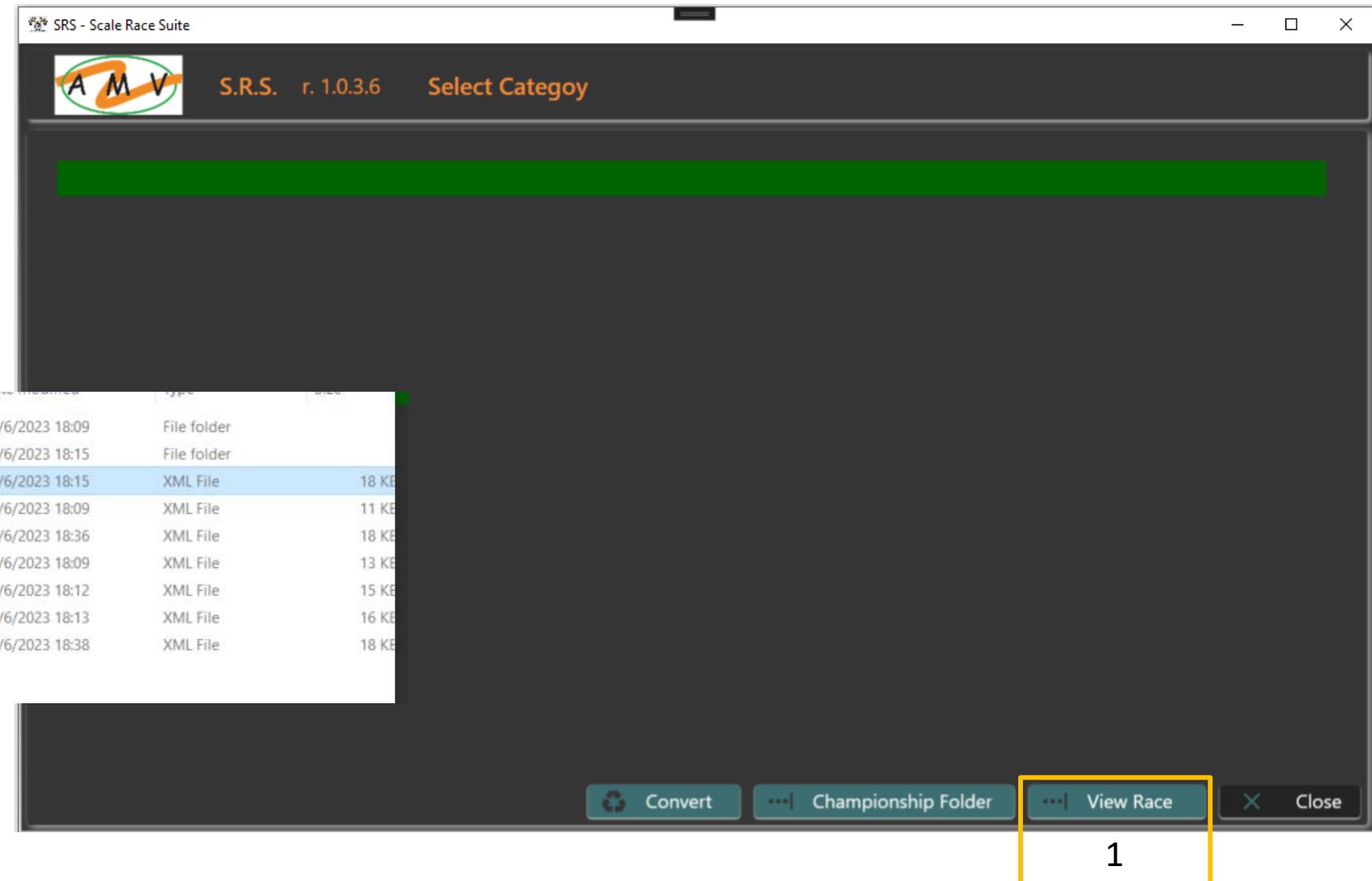


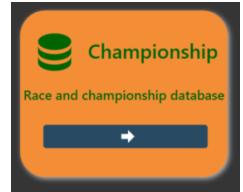
Championship Panel

View Race button (1) allows to open review and edit a race

Race file is in the race folder.

It starts with “FINAL” and extension is xml (2)





SRS – Championship panel

Championship Panel

View Race

In the top area (1) the race results are shown and, in the bottom, (2), double clicking on a driver the plotting is shown

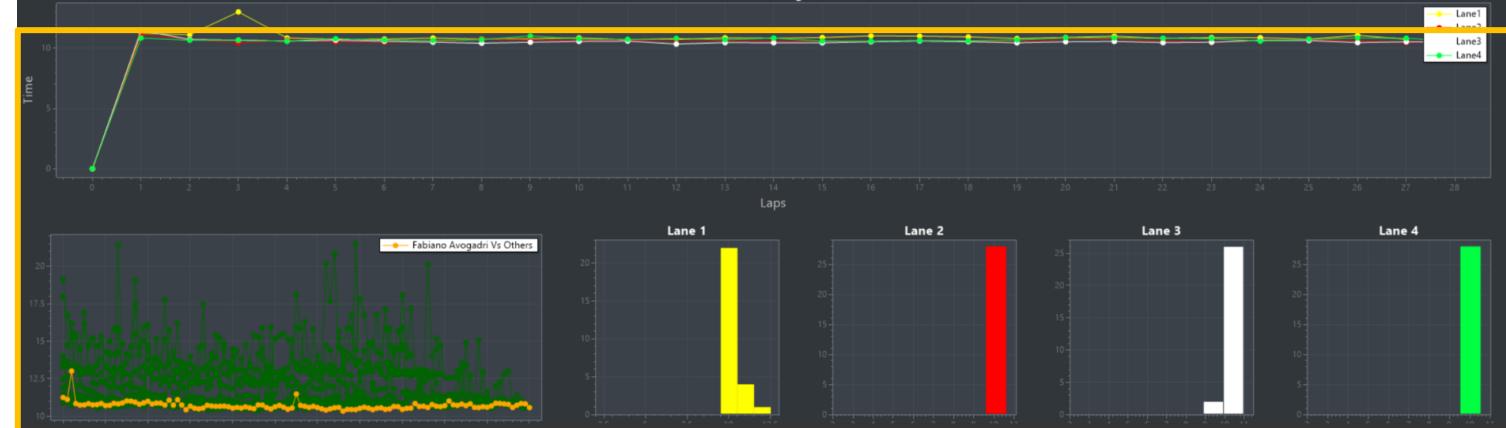
The edit button at the bottom (3) allows to edit all the race data of any single driver.

1

AMV Scale Race Suite Revision 0.9.0.5

POS	Driver	Qual time	Lane 1	Lane 2	Lane 3	Lane 4	Total	Sectors	Best	Average	Points
1	Fabiano Avogadri	00:10.388	27	28	28	28	111	114	00:10.350	00:10.726	25
2		00:10.379	28	28	28	27	111	48	00:10.378	00:10.776	20
3	Giovanni Sartori	00:10.684	27	27	28	27	109	72	00:10.427	00:10.952	17
4	Alessandro Cimini	00:10.788	27	27	28	27	109	9	00:10.744	00:11.005	15
5	Bruno Gatti	00:10.868	27	27	27	26	107	87	00:10.598	00:11.149	14
6		00:10.926	27	27	26	25	105	15	00:10.737	00:11.418	13
7	Fabio Sartori	00:11.157	24	26	26	25	101	77	00:10.994	00:11.814	12
8	Nicola Sartori	00:11.918	23	24	24	23	94	46	00:11.778	00:12.722	11
9		00:12.504	24	23	22	21	90	100	00:11.550	00:13.226	10
10		00:12.939	22	22	23	22	89	130	00:12.700	00:13.342	9
11		00:12.812	20	22	23	21	86	127	00:11.924	00:13.786	8
12	Massimo Cimini	00:14.287	19	22	21	19	81	76	00:12.849	00:14.703	7

Fabiano Avogadri



2

SRS - Scale Race Suite

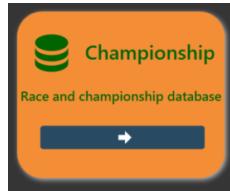
AMV Scale Race Suite Revision 1.0.3.6

Position	Driver	Macchip	Qualif. T	Lane 1	Lane 2	Lane 3	Lane 4	Total	Sectors	Time	Best T	Average T	Reaction T	Points
1	Matteo Sartori		00:00.000	04	02	03	02	11	0	00:40.656	00:01.193	00:03.696	00:00.760	25
2	Bruno Gatti		00:00.000	02	03	02	03	10	0	00:42.897	00:01.184	00:04.289	00:00.762	20
3	Fabiano Avogadri		00:00.000	01	04	02	02	9	0	00:35.996	00:01.217	00:04.499	00:01.975	17
4	Fabio Sartori		00:00.000	03	02	03	01	9	0	00:44.732	00:01.414	00:04.970	00:01.212	15

3

Edit Save Race Close Race

SRS – Championship panel

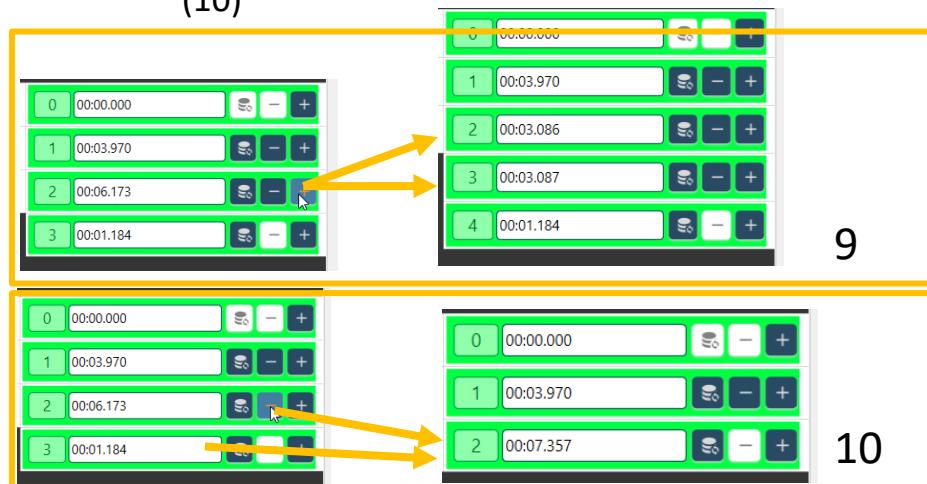


Championship Panel

Edit race data

When the edit button is pressed you can access and edit all the data like:

- The car (4)
- You can also add a new car typing in the box (5) and pressing enter you will find listed in the menu (6) and it is also automatically saved in the driver database
- The time of any single lap (7)
- Qualification time and Sectors (8)
- Add/sub laps (9)
- Adding (+) the lap time will be divided 50% on the old and 50% on the new lap (9)
- Subtracting(-) the lap time will be added to the following lap (10)



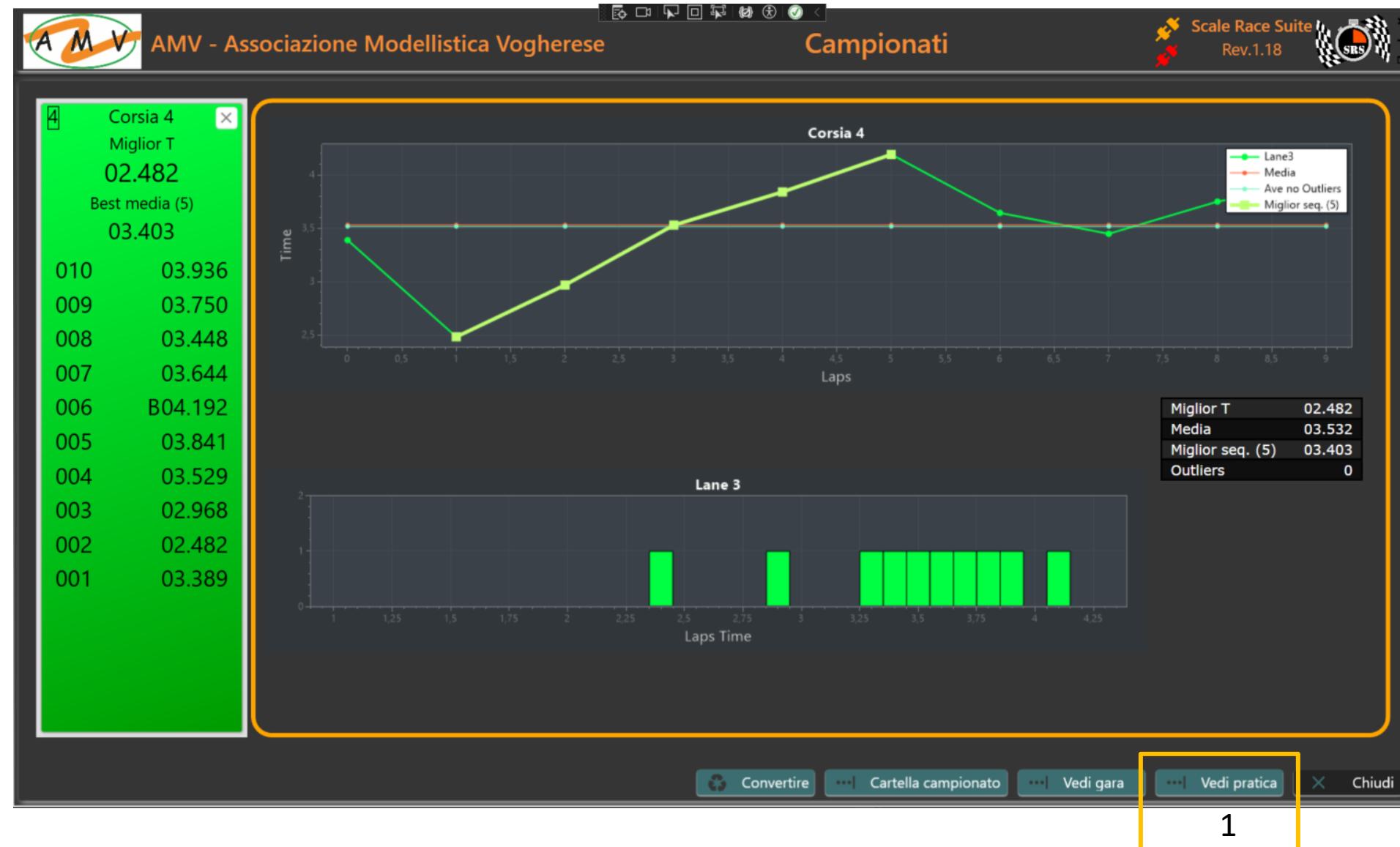
When edit is completed, press END and select if save or not the changes applied

SRS – Championship panel



Championship Panel

View Practice button (1) allows to review a practice session with the list of the laps and a plotting (with zoom options) of the results.



SRS – Practice panel



In the last implementation Practice has also a Best Sequence (in this case 5 laps) as per the setting parameter.



Practice panel can be opened in a second window using the dedicated button (2).

This allows to add drivers or access to the championship results meanwhile practice is running.





SRS2 – Practice panel

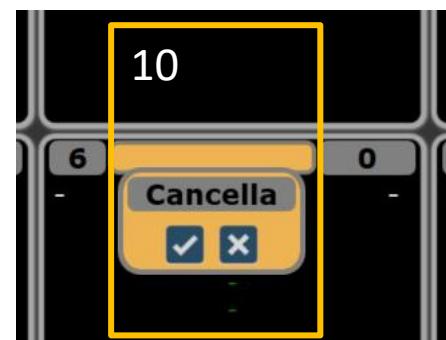
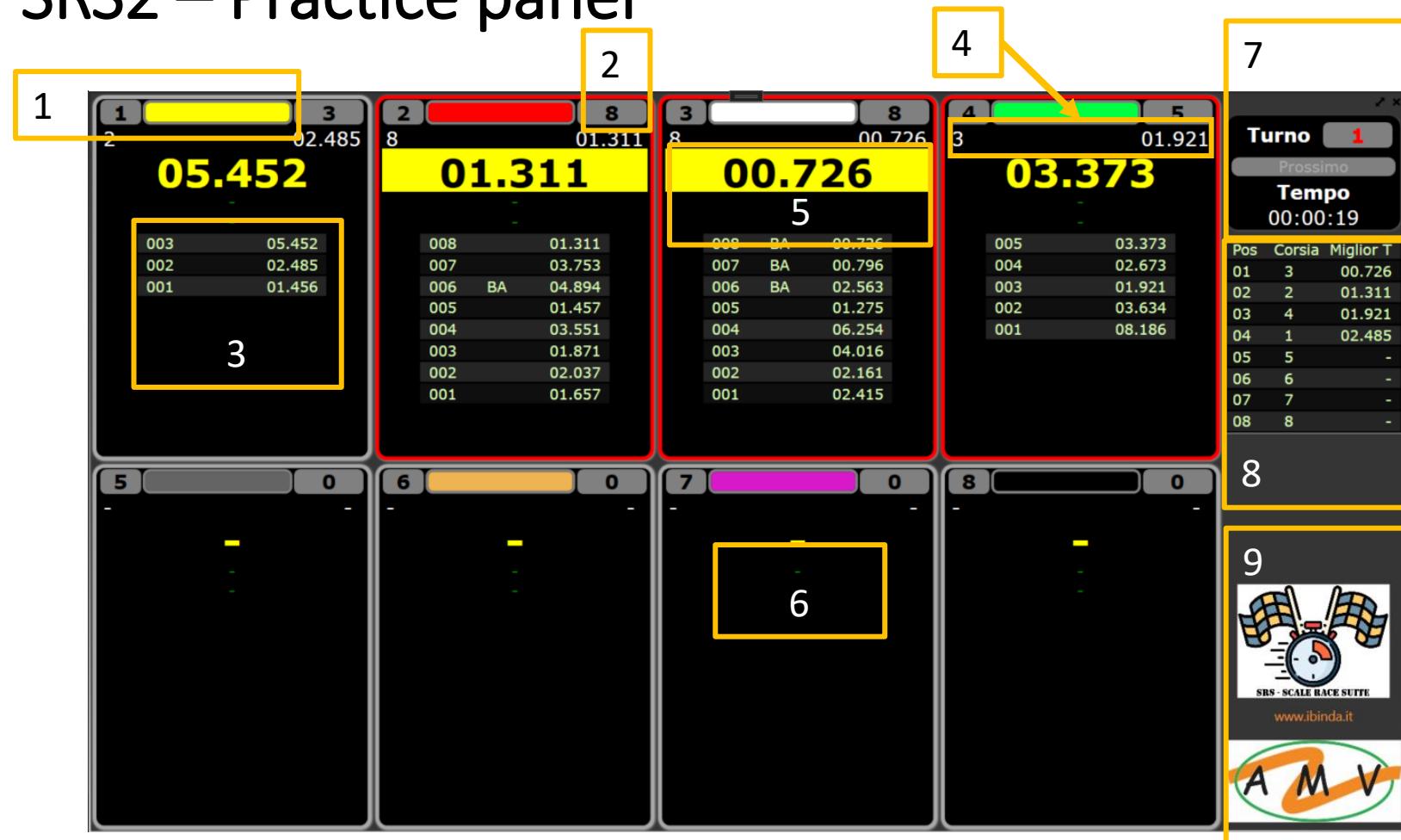
Practice panel is a vertical division panel showing laps, laps times and best lap time for each driver within the defined duration.

When the duration expire the power is removed and a restart is needed, or an automatic cycling can be enabled.

All the stored info are cancelled at the restart.

1. Lane number and color field
2. Number of laps
3. Laps and laps times for each lap
4. Lap of the Best and Best time
5. Last lap time (highlighted if a new Best).
 1. Border is colored red for some seconds
6. Driver Name
7. Race status, maximize/minimize and close window
8. Practice Rank
9. Setting button (SRS logo) and club logo

If you click on the lane color field(1) a popup (10) appears where you can decide to reset the lane or not



SRS2 – Practice panel



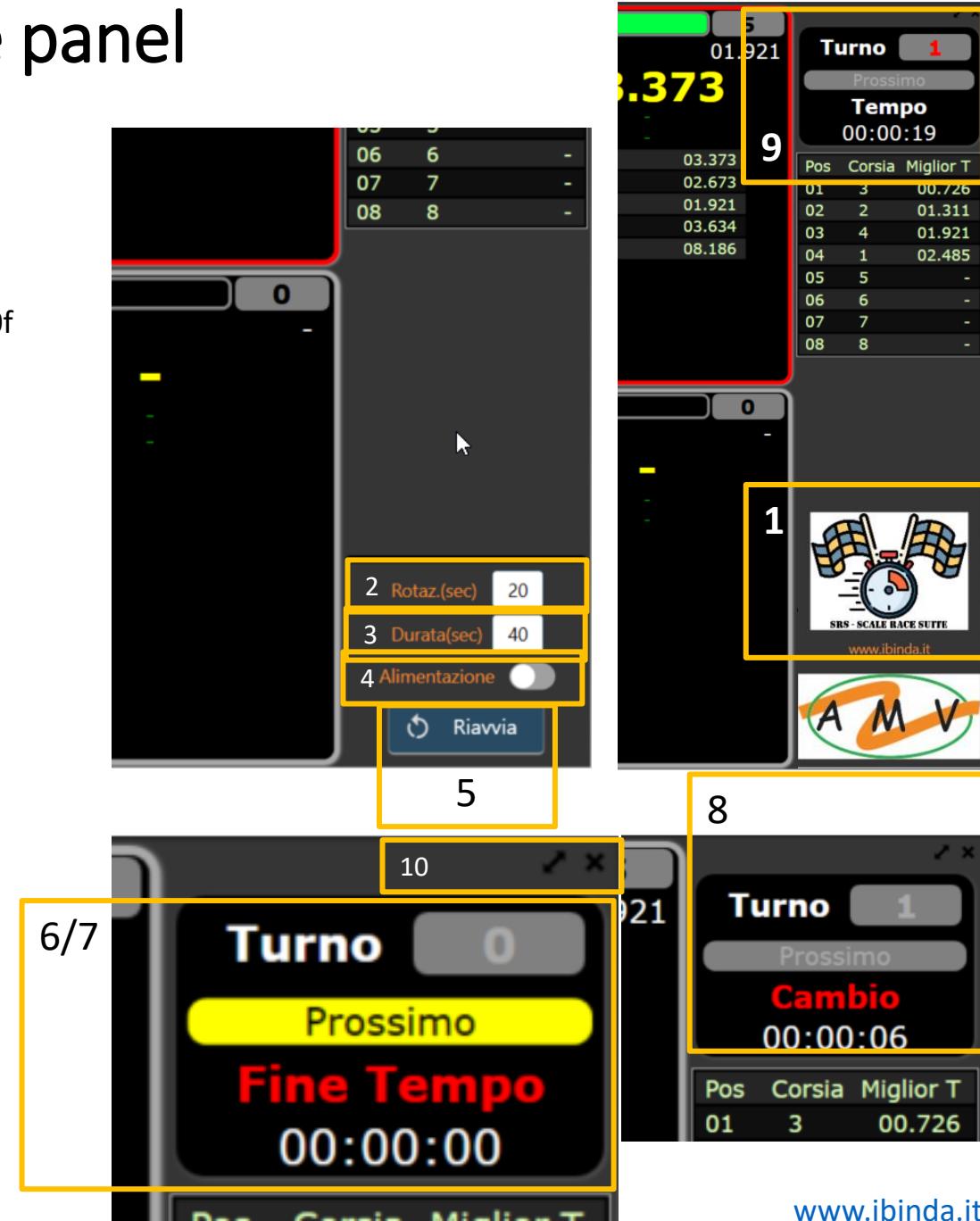
Pressing the SRS logo (1), you have access to some further settings:

1. **Setting button**
2. **Rotation time in sec.** Time needed to change the lane. With DS consider a minimum Of 25 sec related to the beep overhead
3. **Practice duration** in sec
4. **Power**: when duration is elapsed, you can use this button to power the lanes temporary. Remember to return always to off.
5. **Restart**: it is used to start/restart the practice session. It can be used at any time to reset the panel and the session and restart the power.

The 3 possible view of the race status (6) are the following:

7. **End** – Button yellow turns grey and time label red. Time count is 0
8. **During rotation** – time is counted button is grey time label is red
9. **Practice running** – turn red, button grey time label grey time running

Remember the (10) is the maximize/minimize and close window buttons

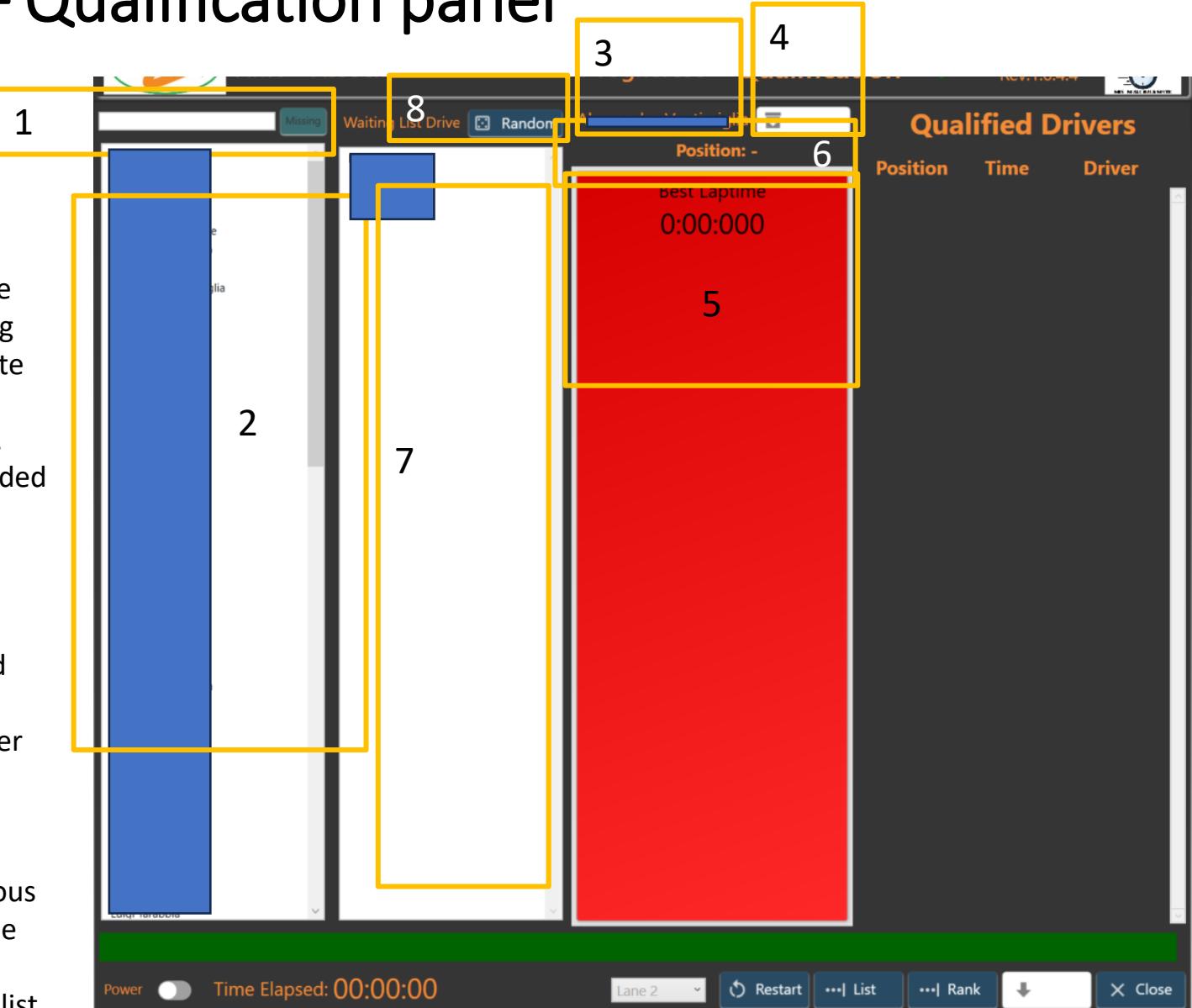


SRS – Qualification panel



When you enter the qualification panel you have the view on the right.

1. **Filter and missing Button:** typing a name or part of the name the driver list will be filtered and will show the corresponding drivers. If the driver (First + Family name separated with white space) is not in the list, you can use the Missing button to quickly add it and afterward change the data in driver panel.
2. **Driver list:** Double clicking on a driver in the list, it will be added to the “waiting list”.
3. **Driver in lane:** it is the name of the driver in the lane for the qualification
4. **Add to grid:** when at least a valid best time is detected the button is enabled and you can add the driver to the qualified drivers list
5. **Lane panel:** It contains the real time information of the driver in qualification. It has the color of the qualification lane.
6. **Position:** it represent the current position of the driver
7. **Waiting list:** it represent the number of drivers that should start. Loaded one by one or using the List button from previous races. Double clicking on one driver you remove him from the waiting list
8. **Random:** it will select randomly one driver from the waiting list and insert in the lane



SRS – Qualification panel



- Editable time:** when the driver is in grid and for some reason the qualification time must be changed, double click on the desired line
- Time Edi:** you can edit the time and enter a new one. When completed, double click again

Drivers will be now listed with the new order and corrected time.

The screenshot shows the SRS Qualification panel for AMV - Associazione Modellistica Vogherese. The interface includes a toolbar with buttons for Missing, Waiting List Drivers, Random, Macchina, RC TAG, Position 2, Best Laptime, and a list of lap times. On the right, a table titled "Qualified Drivers" lists three drivers: 001 (Time 02.211), 002 (Time 02.619), and 003 (Time 02.657). The second driver's time cell is highlighted with a yellow box. At the bottom, there are buttons for Power, Lane 1, List, Rank, Race, and Close, along with a timer showing 00:00:27.

Qualified Drive		
Position	Time	Driver
001	02.211	Cari
002	2 02.619	Federi
003	02.657	Pao

Qualified		
Position	Time	Driver
001	02.211	
002	02.657	
003	01:04.619	

SRS – Race panel



When the race panel is opened, it is almost empty.

To start the race preparation, it is mandatory to select the **category** (1).

The dropdown menu' will show all the available categories.

When selected the window will be populated with the driver list, filter line and Missing button (2).

Double clicking on a driver name in the list, a corresponding line on the right is added with the preliminary session and lane information (3).

You can at any time remove the line (pressing X button), edit the qualification time, change the session number and the starting lane

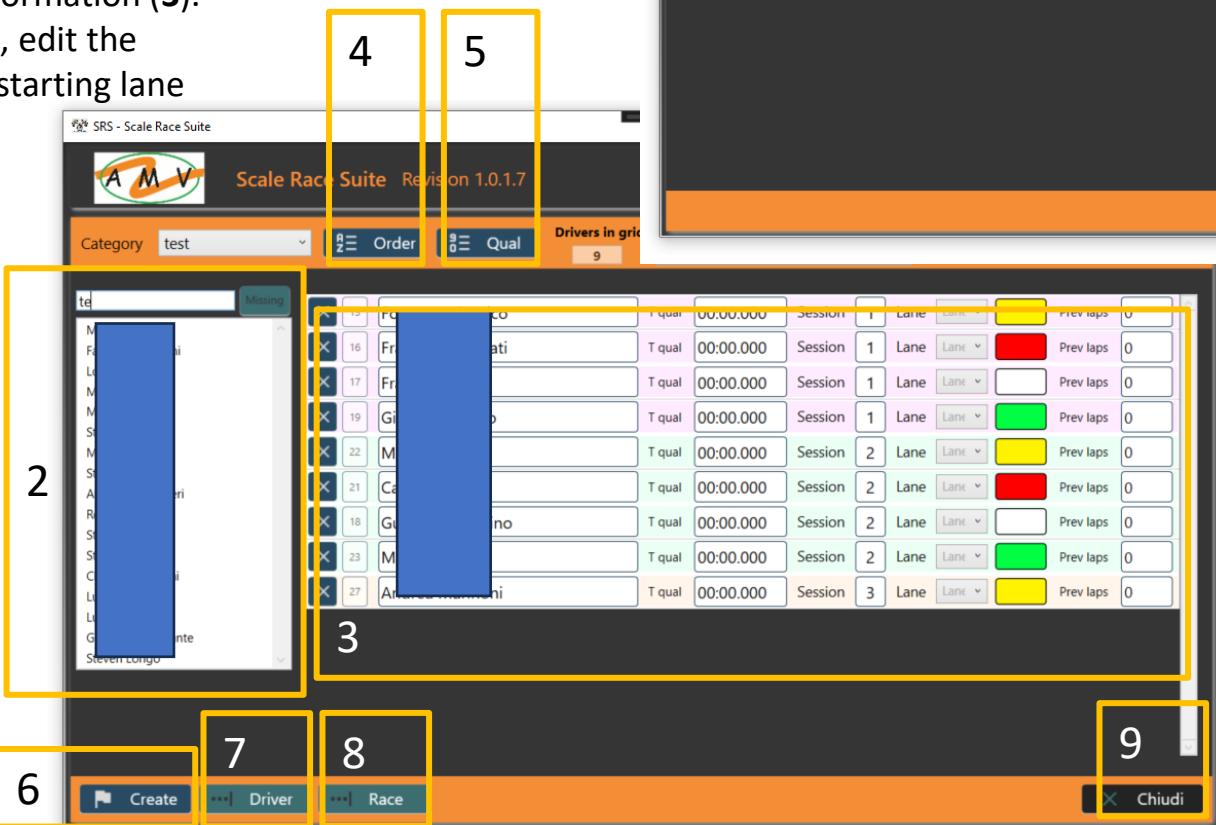
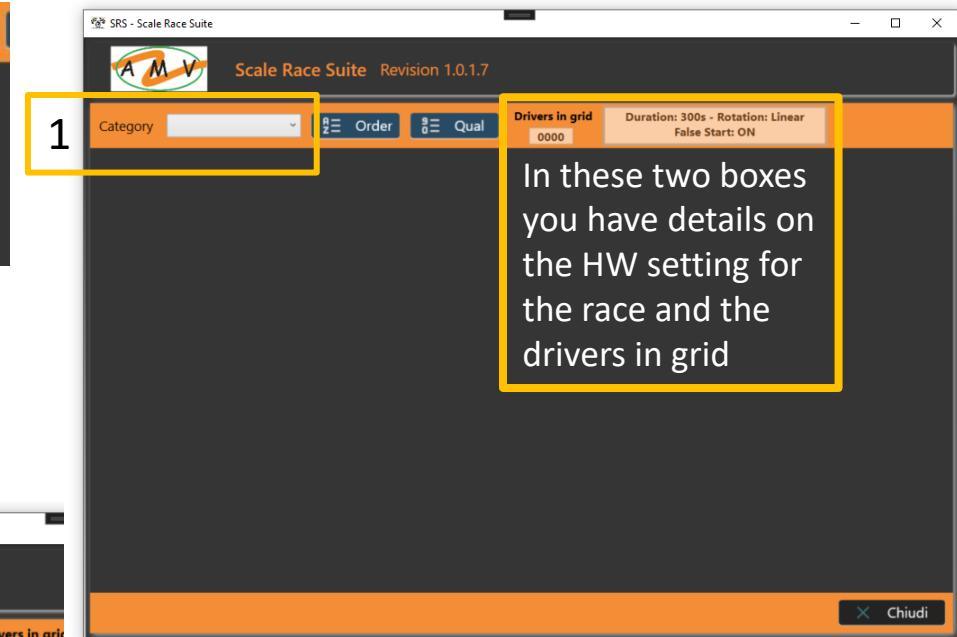
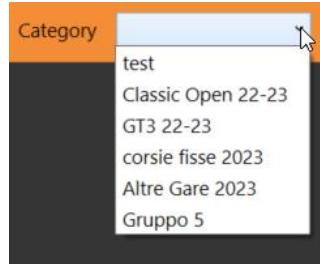
Order (4) and **Qual** (5) buttons are used to reorder the list ordering by Session (4) or qualification time Tqual (5). Any time you click the button you invert the order

When all is fine **Create** button (6) will move to the race panel.

If you have a previous drivers list, you can use the **Driver** button (7) to load it.

If you need to reload a race to complete it (issue occurred), you can use the **Race** button (8) and load the last available race backup file.

You can also return to main panel with Exit/**Close** button (9). In this case the populated list will be saved



SRS – Race panel



Race Panel

1 SRS - Scale Race Suite

Time: 00:00:20

POSITION

1 Avogadri Fabiano

CATEGORY test

Totale **11**

Media **25.649**

Distacco **+2 Laps**

2 Carbone Biagio

Calaresu Fabrizio

Lane 3

Time

Laps

Miglior T 00.000
Media 18.676
Miglior seq. (5) 00.000
Outliers 3

3 da Ivo

Best 01.429

CATEGORY test

Totale **16**

Best 01.243

Giri **16**

Media **17.745**

Distacco **+00.000**

4 POSITION

Best 01.341

CATEGORY test

Totale **16**

Best 01.341

Giri **16**

Media **17.805**

Distacco **+00.960**

Batteria 1/1 Manche 1/4 Riavvia

Tempo: 00:05:00 00:00:00 Status END

Classifica Batteria

Pos	Pilota	Giri	Distacco
1	Calaresu Fabrizio	16	+00.000
2	Binda Ivo	16	+00.960
3	Carbone Biagio	14	+2 Laps
4	Avogadri Fabiano	11	+3 Laps

Classifica Parziale @ 05:00

Pos	Pilota	Giri	Distacco	Battaria
1	Calaresu Fabrizio	16	+00.000	1 - 3
2	Binda Ivo	16	+00.960	1 - 4
3	Carbone Biagio	14	+2 Laps	1 - 2
4	Avogadri Fabiano	11	+3 Laps	1 - 1

Last Lap Delay Lap Total Proj Endu Rank Delay

00:00.000 0 - 00:00.000

00:00.000 0 - 00:00.000

00:00.000 0 - 00:00.000

00:00.000 0 - 00:00.000

00:00.000 0 - 00:00.000

00:00.000 0 - 00:00.000

00:00.000 0 - 00:00.000

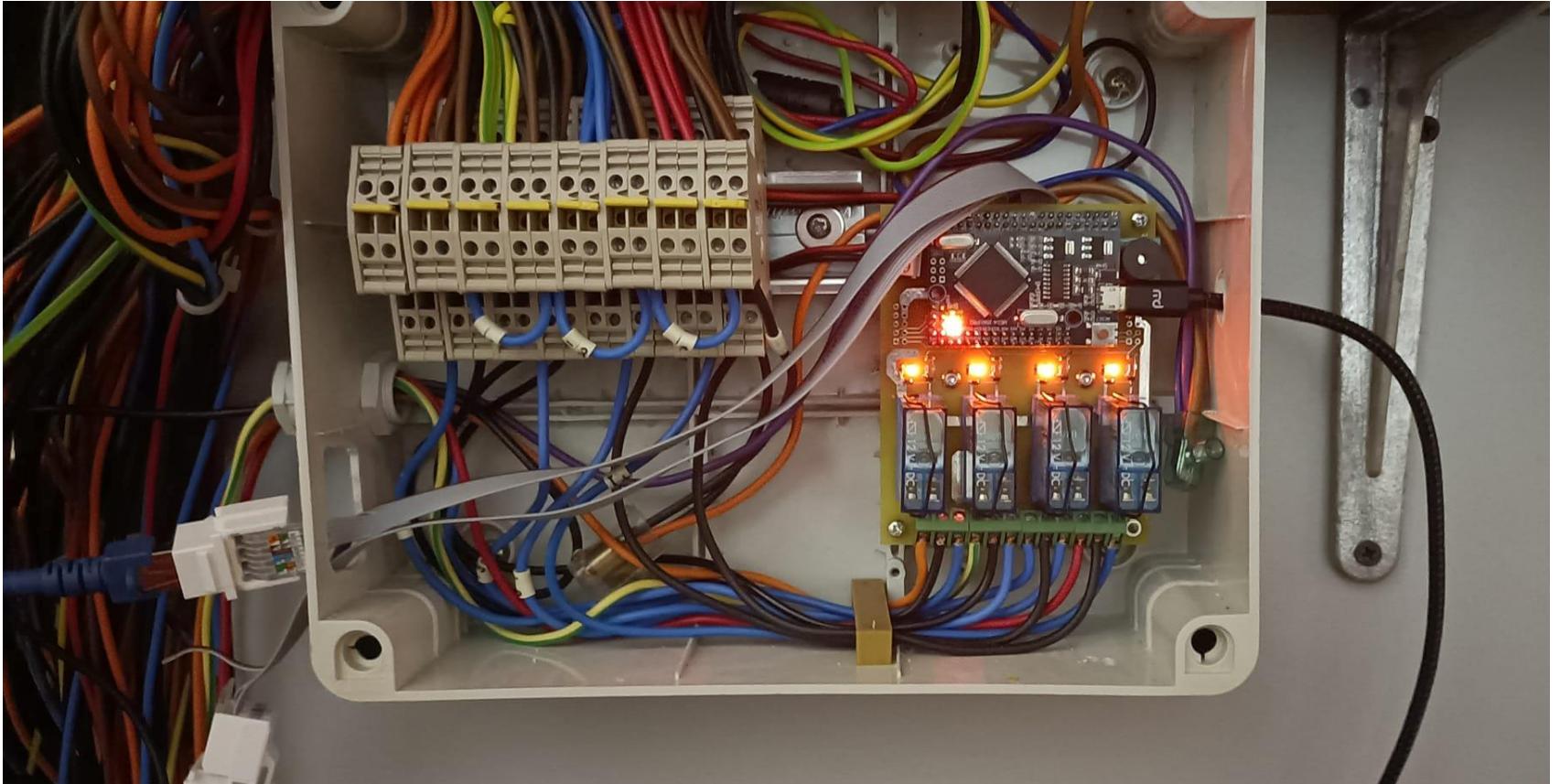
Manche 1/4 WaitDS More + Add Lap Close

SRS - SCALE RACE SUITE 1.2.15 AMV - Associazione Modellistica Vogherese

www.ibinda.it

SRS hardware (main + rele' box)

Transponder integration for slot racing should allow to drive the rele' box
For rally and Mini Z is not needed.



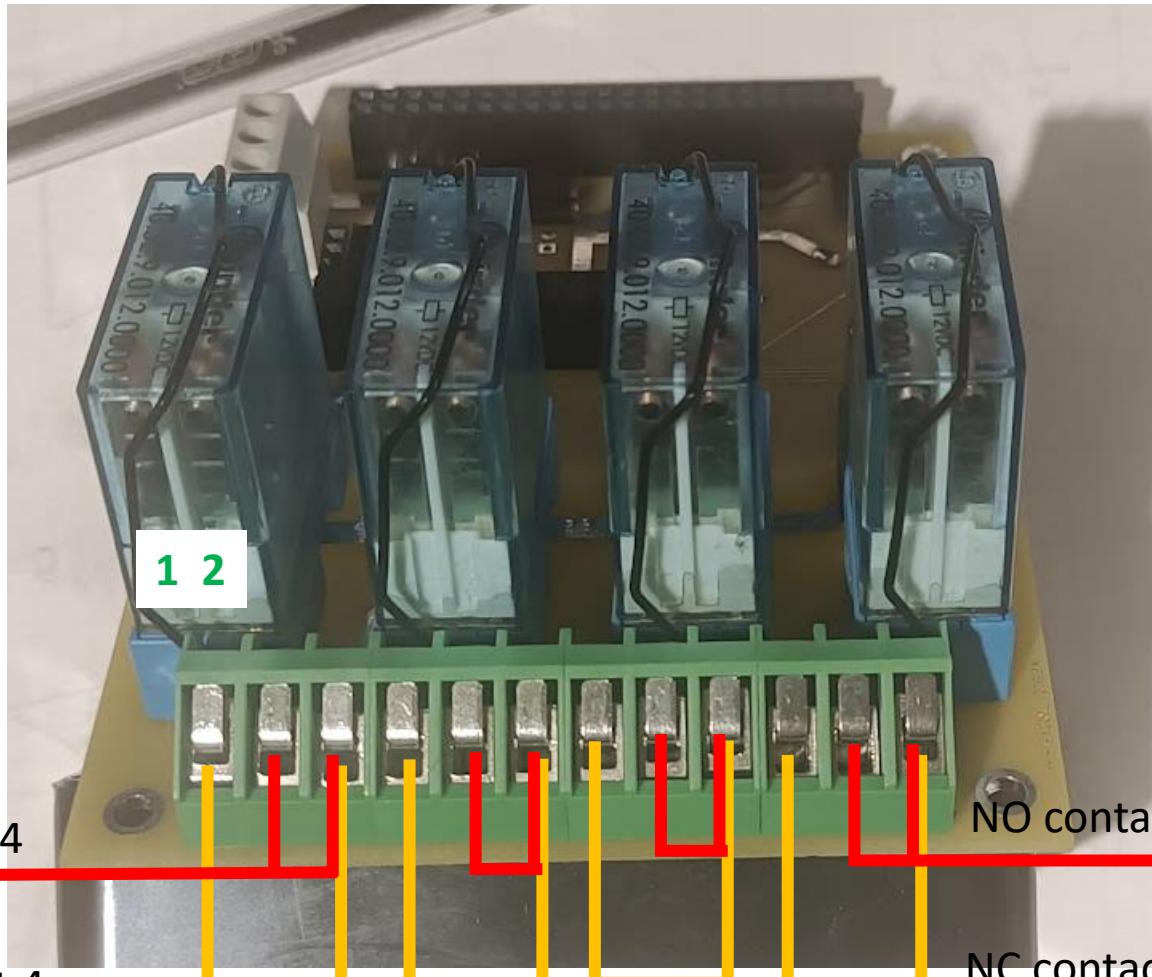
SRS hardware connections

'Finder rel' are 2x16A relay

The 2 channels are in parallel

Each relay is independent and designed to control directly one lane.

Suggested connection is to use NC contact so even if SRS is not powered the track is powered.



SRS hardware connections 1

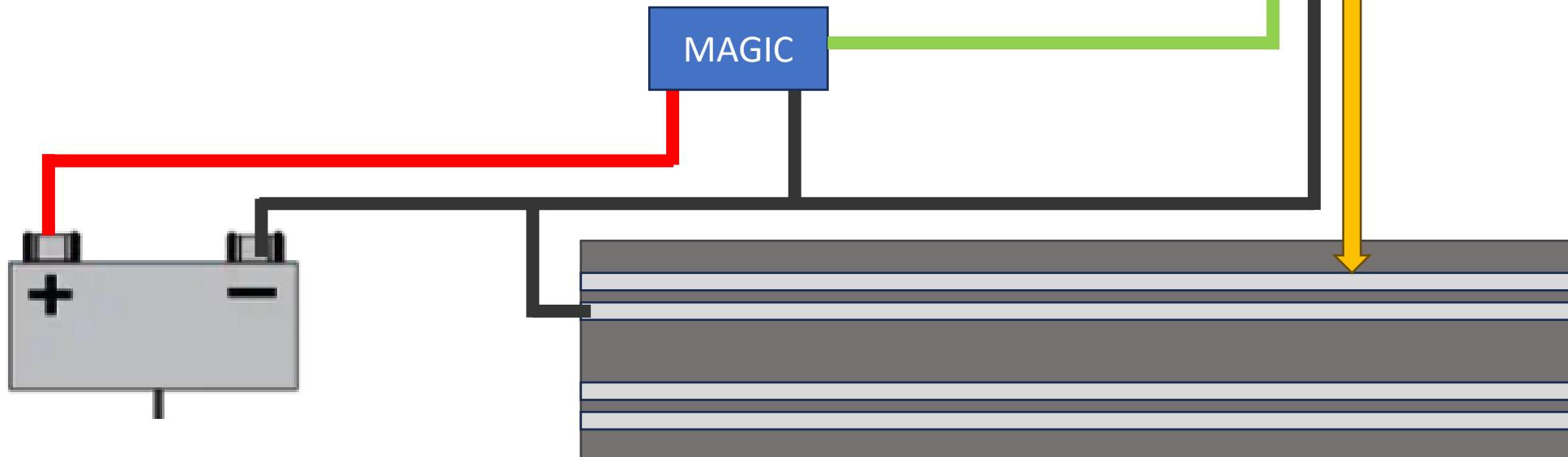
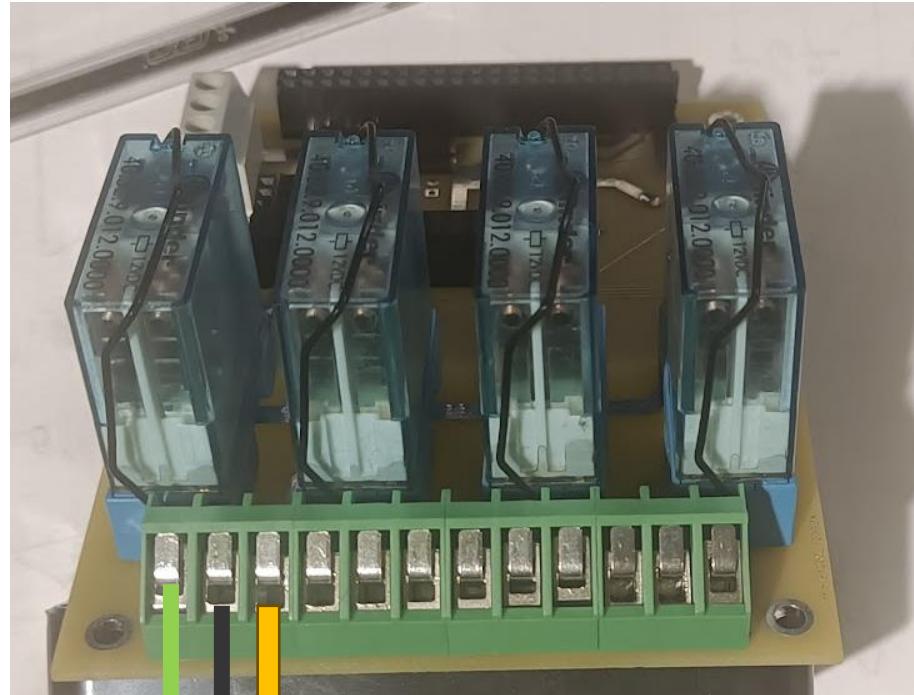
Control platform always powered

SRS controls directly the lane.

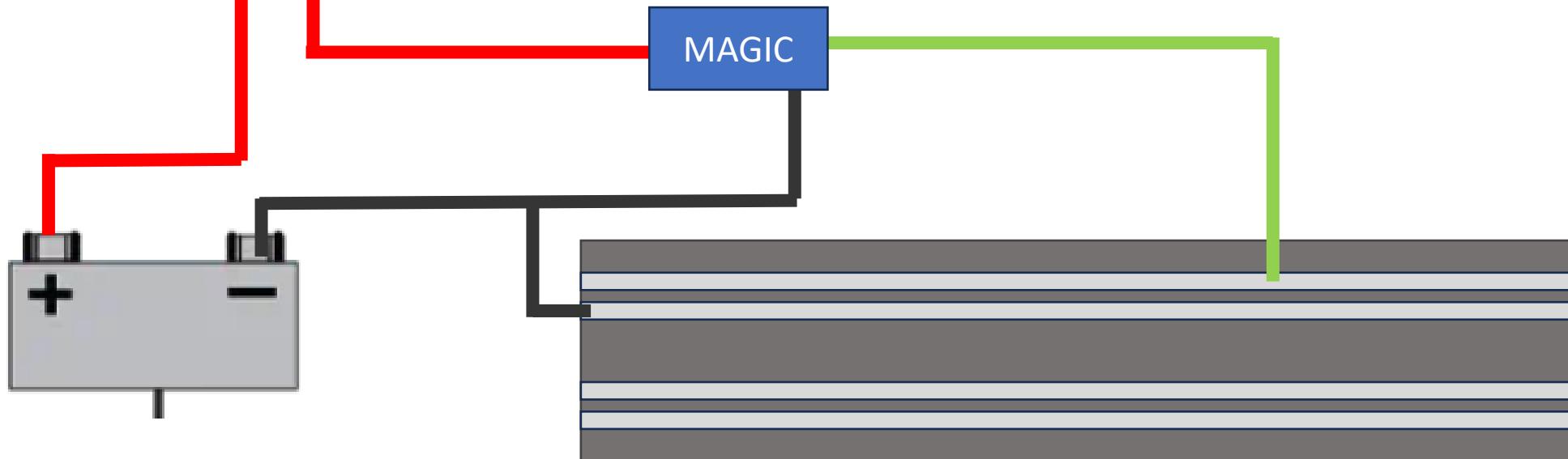
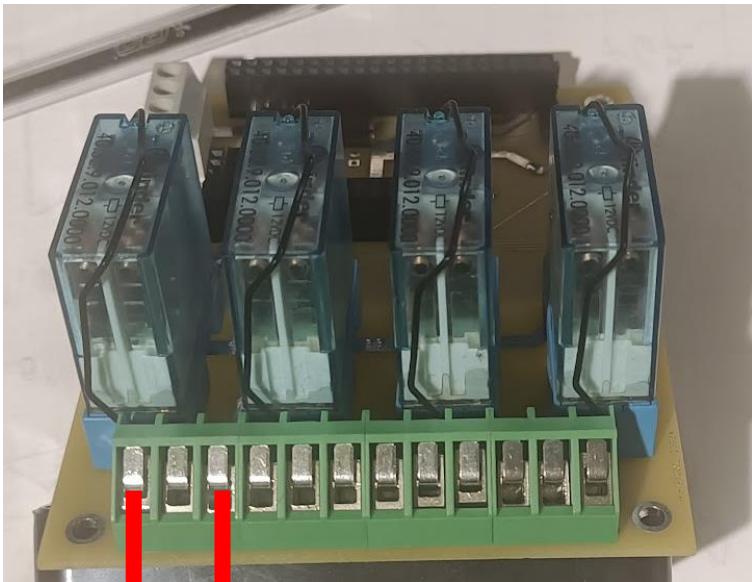
If not powered the NC contact allows to use and power the lane.

When SRS is powered, the lane is in full break (NO contact connected to ground) if the race is off.

When the race start the lane is powered and as soon as the time finish the lane is again in full break.



SRS hardware connections 2



Control platform interrupted

SRS controls directly the Platform power.

If not powered the NC contact allows to use and power the platform.

When SRS is powered, the platform is open(NO contact floating) if the race is off.

When the race start the platform is powered and as soon as the time finish the power is open but no brake feature is offered.

SRS hardware connections 3

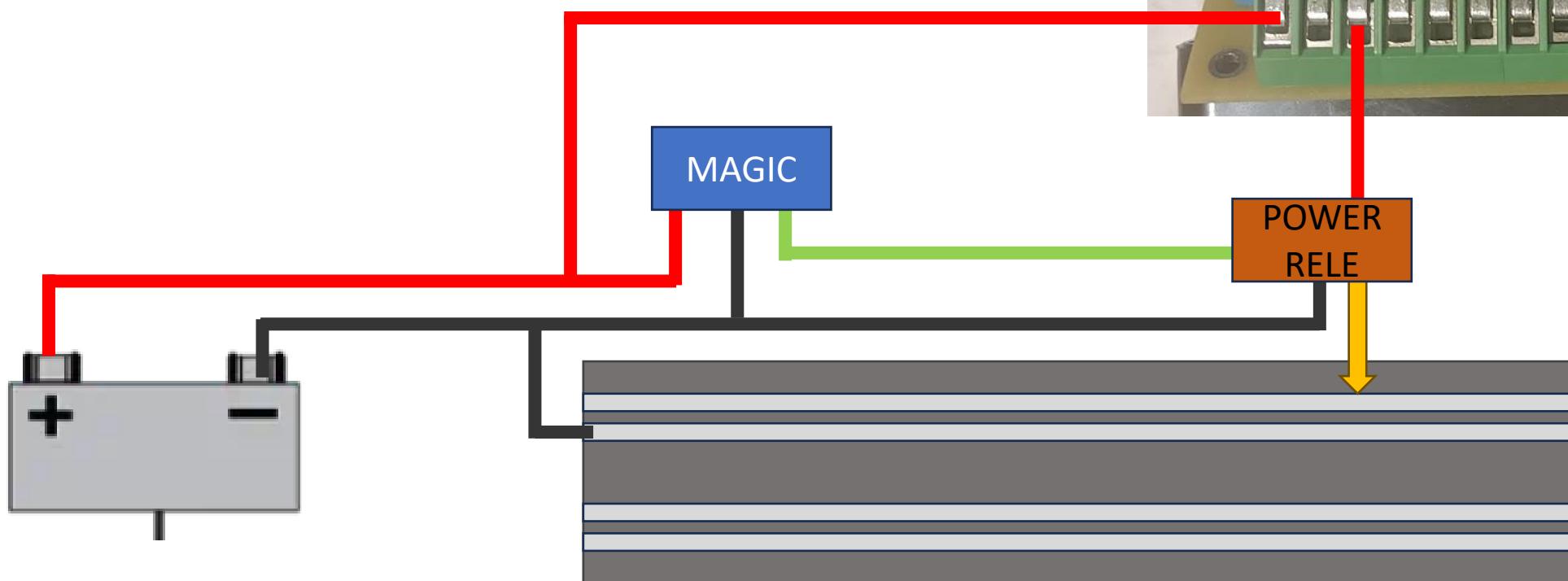
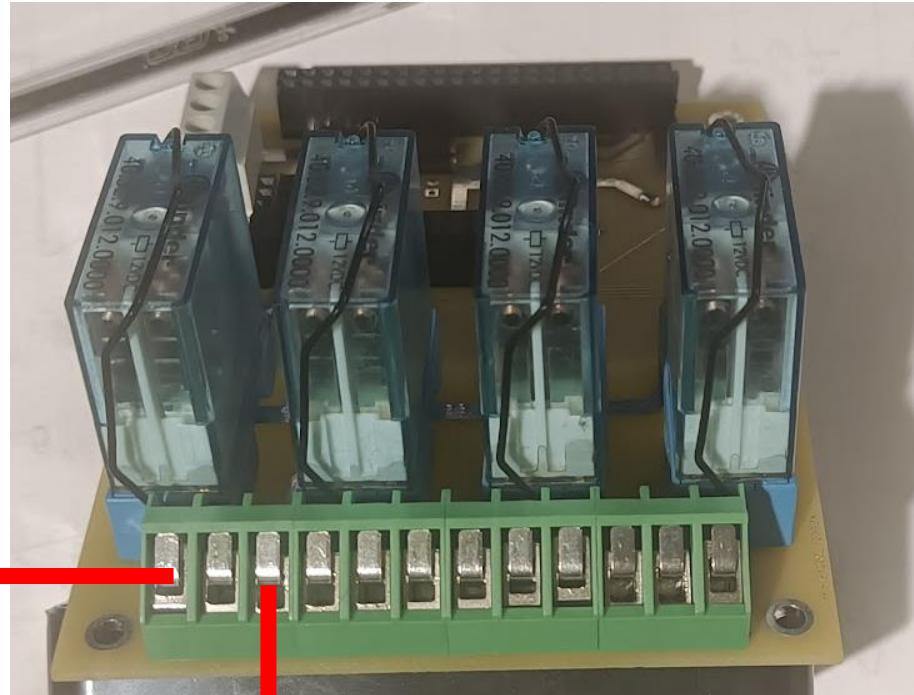
Equal to #1 but with additional power rel' (30-40A)

Control platform always powered

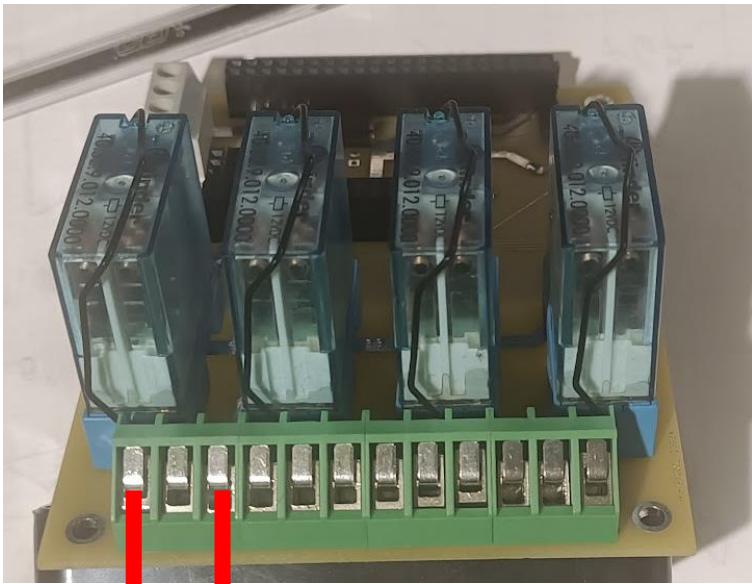
SRS controls the power rel' or more than one.

One single SRS rel' can drive multiple power rel' if false start is not used.

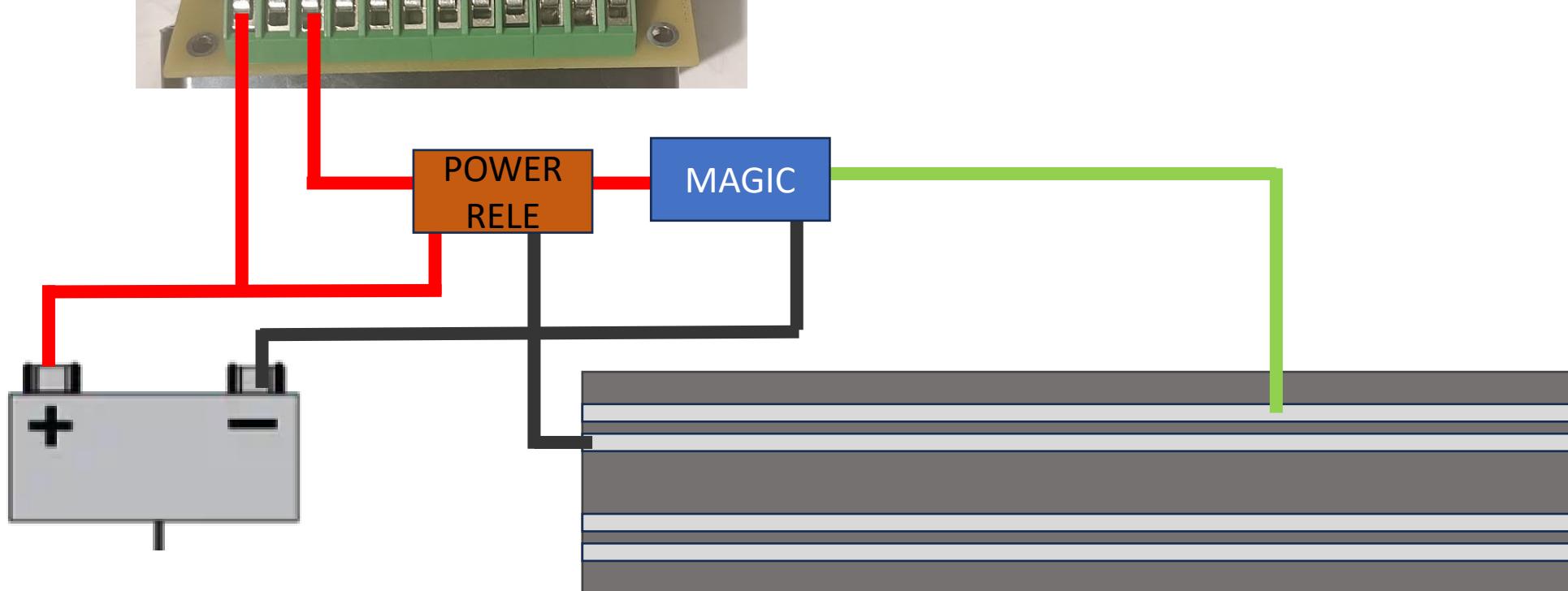
If the power rel' has the double contact NO-NC it is possible to have the brake function



SRS hardware connections 4



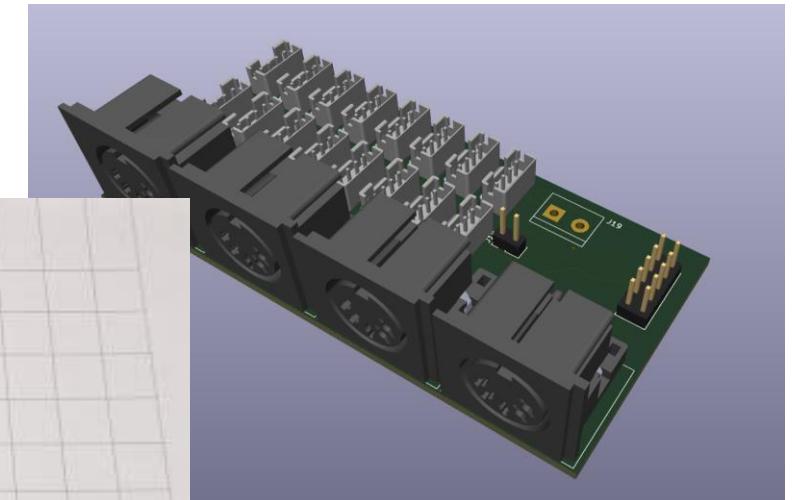
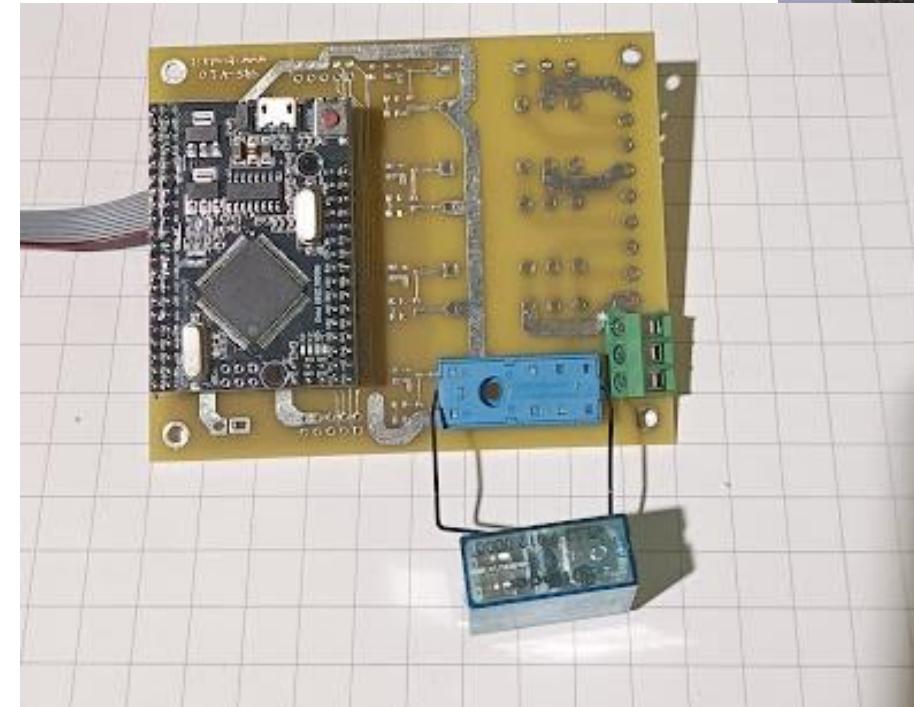
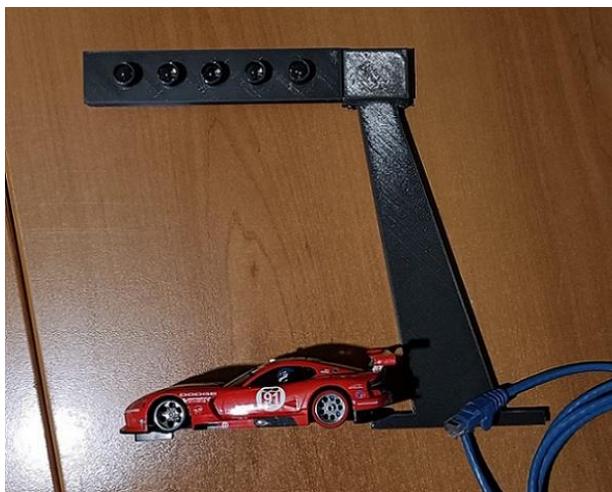
Equal to connection #2 but with additional power rele'
SRS controls directly the Platform power.
Also in this case one single rele' of SRS can drive multiple power rele'.
Brake feature not available.



SRS – costi

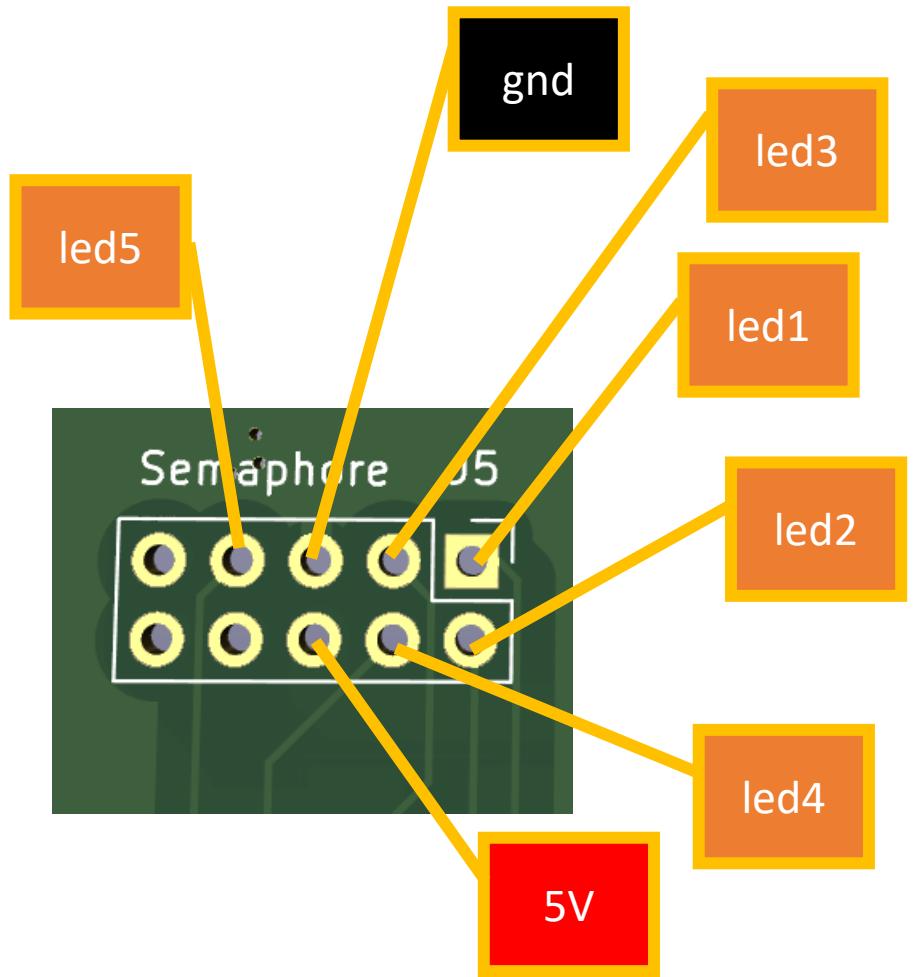
Costi di SRS:

- SRS SW – compatibile con SRS_HW, SRS_AUX, DS200/DS300, gestione piu' piste. [REDACTED]
- SRS repository – storage su ftp di pagina web dati gare – [REDACTED]
- **Aggiornamenti inclusi con SW e repository**
- SRS_HW – [REDACTED]
 - scheda dotata di microcontrollore per connessione fino a 8 sensori corsie
 - Possibilita' di controllare l'alimentazione della singola corsia con rele' dedicato. Funzione FRENO a fine tempo
 - Possibilita' di connessione semaforo per falsa partenza
 - Alimentatore 12V
 - Possibilita' di connettere fungo "ponte"
 - Adattatore per connessione ponte DS o altri sensori
- Controllo singola corsia – [REDACTED] corsia
- Semaforo con 1mt di cavo [REDACTED]
- Supporto per installazione – **da definire.**

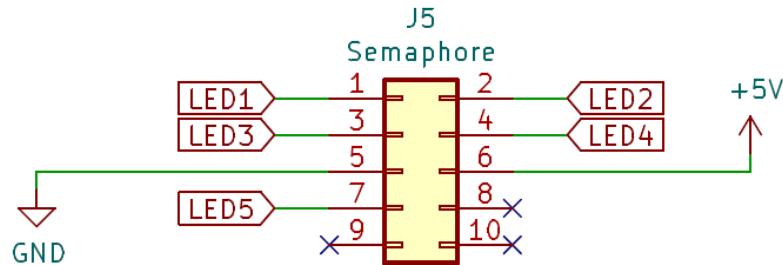
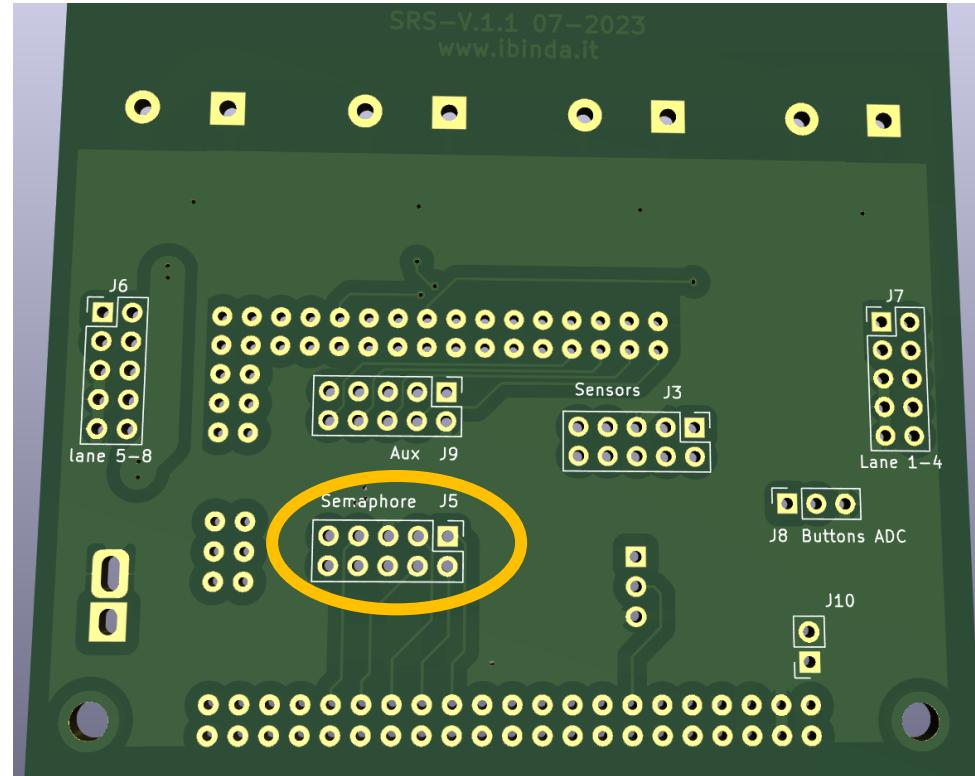


SRS – altri dettagli tecnici

SRS Semaphore connection



Semaphore LEDs
connection on the
PCB bottom.



Thank you

