

SRS – Scale Race Suite

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

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

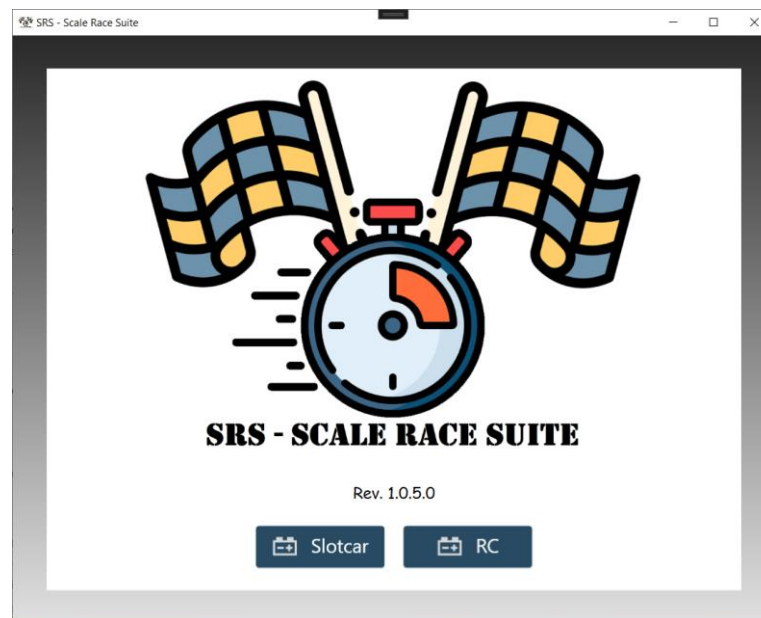
The suite consists of a graphic user interface and a dedicated HW.

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 Race Suite manual with all the basic information on how to use the suite.

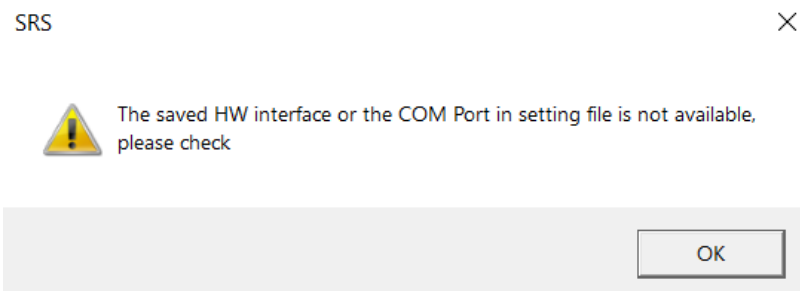
Let's start.

Double click on **SRS.exe**

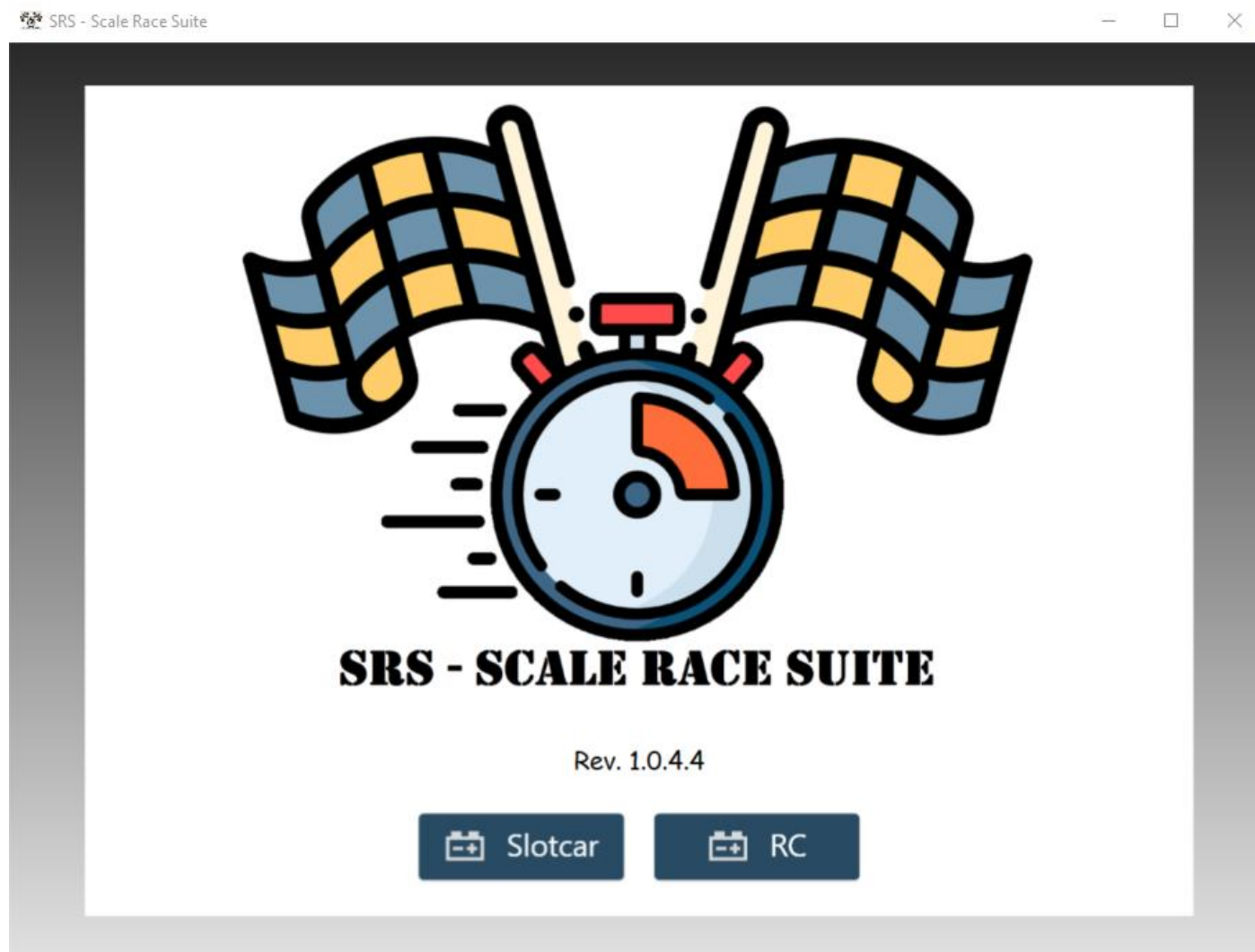
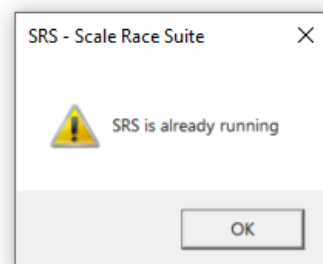
The suite will start with the Intro screen

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

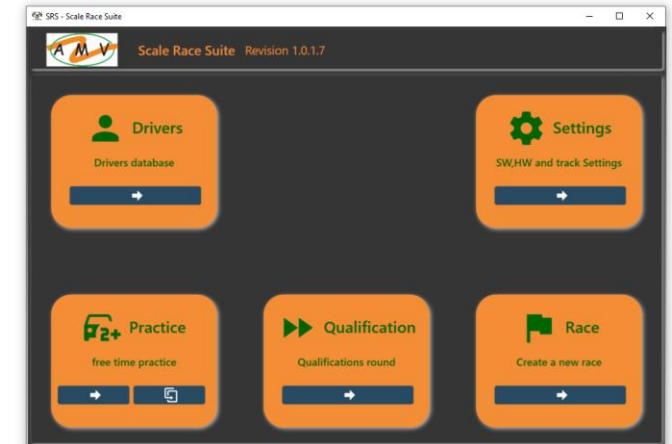
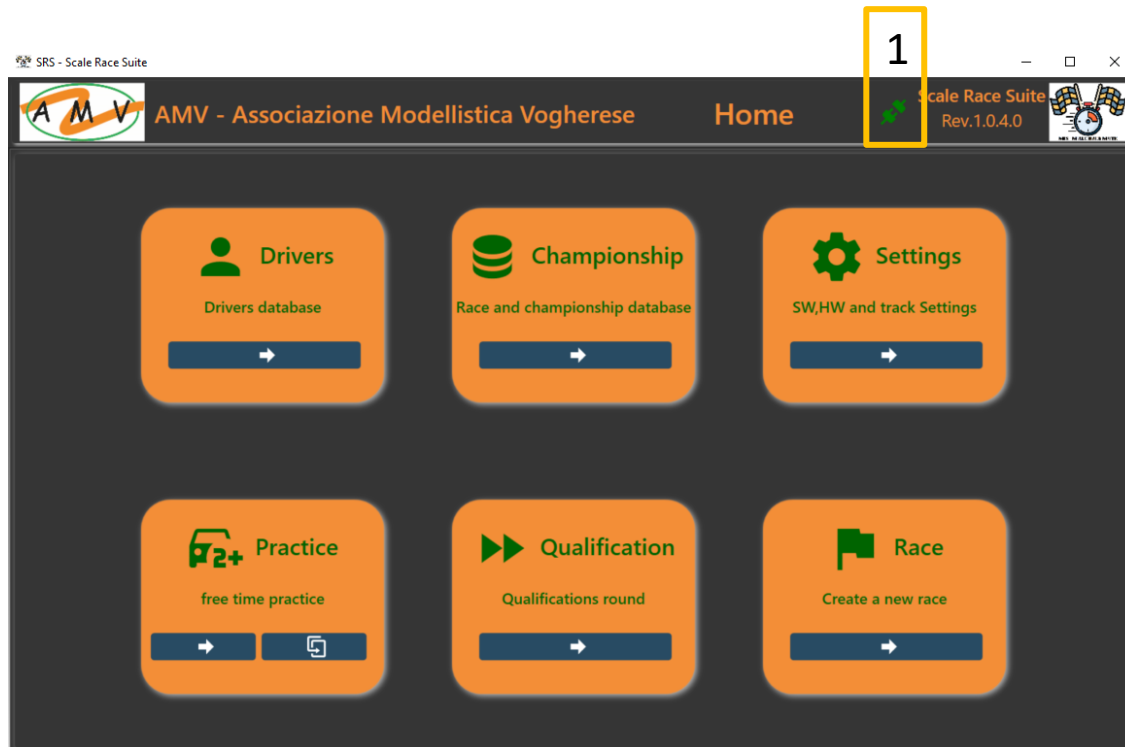
When a race type is selected you enter in the main menu.

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.

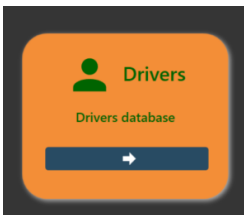
In the main panel you can select:

- **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.



From SRS rev 1.0.4.0 an icon in the title bar (1) indicates the status of the connection with the HW. With DS it will be orange if the connection is open. Run a practice session to check if the connection is well established.

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

ID	FirstName	FamilyName	Nickname	Address	City	Zip	Phone	Email	Team	Tag	Cars	CreationData
1							+			(Collection)	(Collection)	8/29/2021 9:5
3							+			(Collection)	(Collection)	8/29/2021 9:5
4							+			(Collection)	(Collection)	8/29/2021 9:5
5						3	4	5		(Collection)	(Collection)	8/31/2021 6:1
6				9	8	7	6	5		(Collection)	(Collection)	8/31/2021 6:1
8										(Collection)	(Collection)	12/13/2021 1:
9			GB							(Collection)	(Collection)	1/7/2022 10:3
10							000			(Collection)	(Collection)	1/15/2022 4:4
12										(Collection)	(Collection)	1/28/2022 8:3
13										(Collection)	(Collection)	1/28/2022 8:3
14										(Collection)	(Collection)	1/28/2022 8:3
15										(Collection)	(Collection)	1/28/2022 8:4
16										(Collection)	(Collection)	1/28/2022 8:4
17										(Collection)	(Collection)	1/28/2022 9:1
18										(Collection)	(Collection)	2/4/2022 10:0
19										(Collection)	(Collection)	2/4/2022 10:0
20										(Collection)	(Collection)	2/4/2022 10:1
21										(Collection)	(Collection)	2/11/2022 8:2

Macchina car 4

Cap *

ID 65

Close

Macchina

Cap car 1
car 2
car 3
car 4

ID

SRS

Do you want to remove car 1

Yes No

car 1

car 2
car 3
car 4

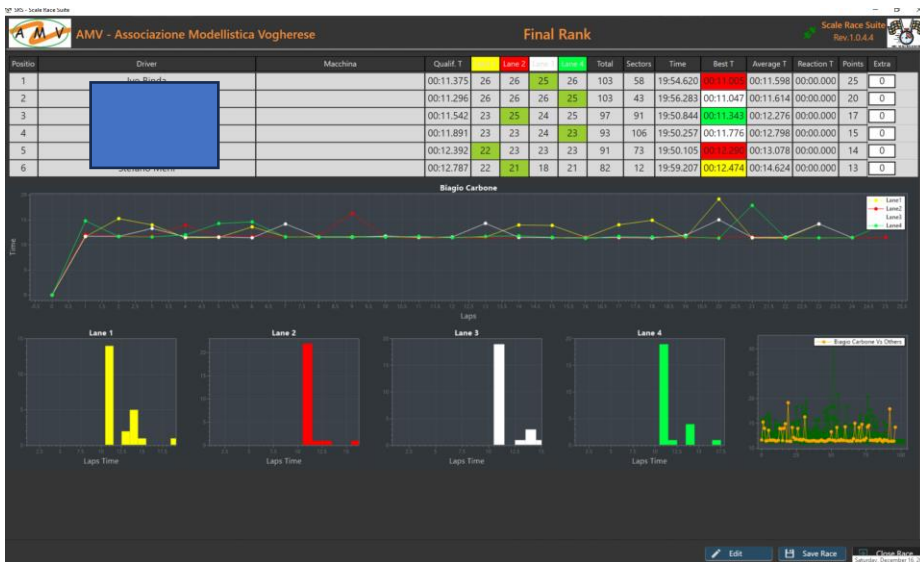
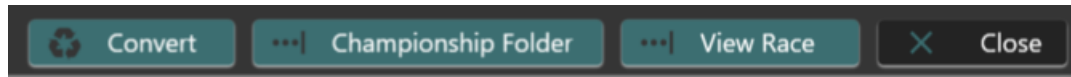
SRS – Championship panel



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_XXXXXX.xml race result file to review and edit the content.
- Close returns to the Home



View Race

View championship Rank

Associazione Modellistica Vogherese - Classic_Open_22-23

	2022-09-30 - Gara 1	2022-10-28 - Gara 2	2022-11-18 - Gara 3	2023-01-13 - Gara 4	2023-02-03 - Gara 5	2023-03-03 - Gara 6	2023-03-31 - Gara 7	2023-04-21 - Gara 8	Total	Total Bl
dri	0	0	0	0	25	20	25	25	95	95
:	0	0	0	0	15	14	20	17	66	66
su	0	0	0	0	13	13	15	15	56	56
cono	0	0	0	0	11	11	13	14	49	49
i	0	0	0	0	20	17	0	0	37	37
ino	0	0	0	0	14	12	0	0	26	26
ino	0	0	0	0	0	0	12	13	25	25
glione	0	0	0	0	0	15	0	0	15	15
glione	0	0	0	0	0	0	14	0	14	14
teri	0	0	0	0	12	0	0	0	12	12
i	0	0	0	0	10	0	0	0	10	10
cono	0	0	0	0	0	0	0	0	0	0
ua	0	0	0	0	0	0	0	0	0	0
li	0	0	0	0	0	0	0	0	0	0
ni	0	0	0	0	0	0	0	0	0	0

lot > Gare 22-23 > Classic_Opena

- Name
- 2022-09-30 - Gara 1
- 2022-10-28 - Gara 2
- 2022-11-18 - Gara 3
- 2023-01-13 - Gara 4
- 2023-02-03 - Gara 5
- 2023-03-03 - Gara 6
- 2023-03-31 - Gara 7
- 2023-04-21 - Gara 8

12/16/2023 10:29 File folder
12/16/2023 10:29 File folder
12/16/2023 10:29 File folder

Select Folder

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)

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AMV S.R.S. r. 1.0.3.6 Select Category

Convert Championship Folder View Race Close

1

Name	Size	Type
StsRace	12/6/2023 18:09	File folder
test_2023_12_06_1809_HTML	12/6/2023 18:15	File folder
FINAL_test_20231206.xml	12/6/2023 18:15	XML File 18 KB
startingDrivers.xml	12/6/2023 18:09	XML File 11 KB
test_20231206_race_status.xml	12/6/2023 18:36	XML File 18 KB
test_20231206_race_status_1_1.xml	12/6/2023 18:09	XML File 13 KB
test_20231206_race_status_1_2.xml	12/6/2023 18:12	XML File 15 KB
test_20231206_race_status_1_3.xml	12/6/2023 18:13	XML File 16 KB
test_20231206_race_status_1_4.xml	12/6/2023 18:38	XML File 18 KB

2



SRS – Championship panel

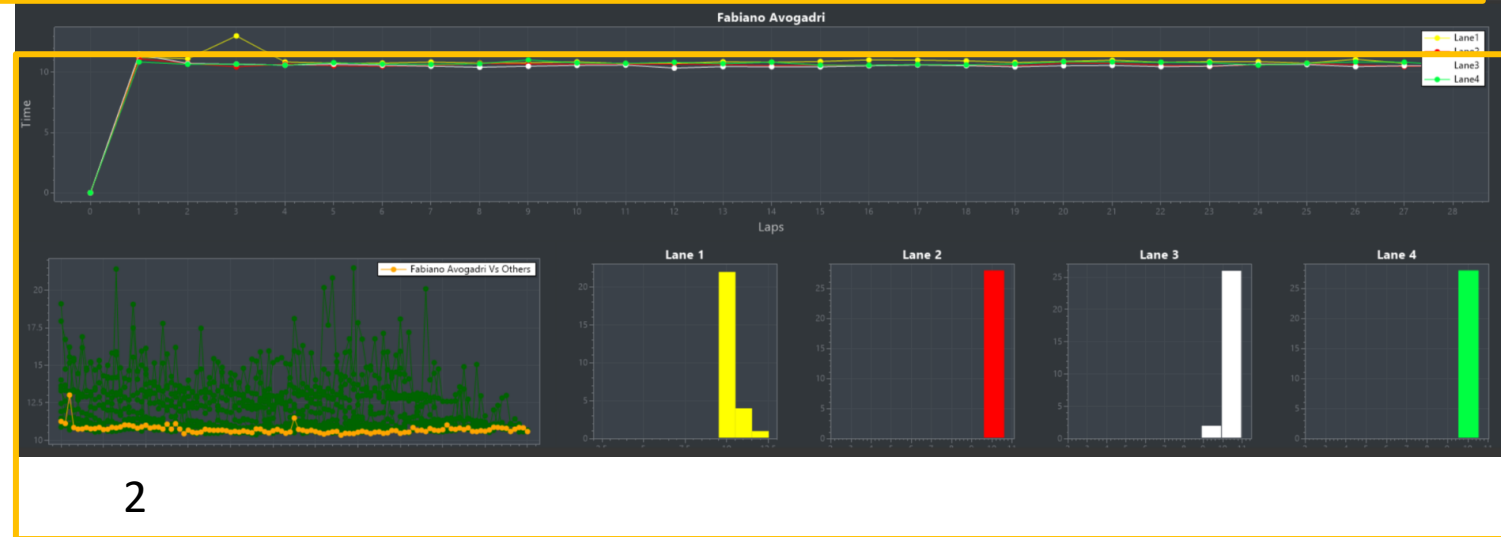
Championship Panel View Race

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

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		00:10.684	27	27	28	27	109	72	00:10.427	00:10.952	17
4		00:10.788	27	27	28	27	109	9	00:10.744	00:11.005	15
5		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		00:11.157	24	26	26	25	101	77	00:10.994	00:11.814	12
8		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	Marco Cimino	00:14.287	19	22	21	19	81	76	00:12.848	00:14.703	7



3

Positic	Driver	Macchir	Qualif. T	Lane 1	Lane 2	Lane 3	Lane 4	Total	Sector	Time	Best T	Average T	Reaction T	Points
1	Matteo...		00:00.000	04	02	03	02	11	0	00:40.656	00:01.193	00:03.696	00:00.760	25
2	B...		00:00.000	02	03	02	03	10	0	00:42.897	00:01.184	00:04.289	00:00.762	20
3	F...		00:00.000	01	04	02	02	9	0	00:35.996	00:01.217	00:04.499	00:01.975	17
4	F...		00:00.000	03	02	03	01	9	0	00:44.732	00:01.414	00:04.970	00:01.212	15

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)

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AMV Scale Race Suite Revision 1.0.3.6

Positic	Driver	Macchir	Qualif. T	Lane 1	Lane 2	Lane 3	Lane 4	Total	Sectors	Time	Best T	Average T
1	M	sc	00:00.000	04	02	03	02	11	0	00:40.656	00:01.193	00:03.696
2	E	w	00:00.000	02	03	02	03	10	0	00:42.897	00:01.184	00:04.289
3	F	ari	00:00.000	01	04	02	02	9	0	00:35.996	00:01.217	00:04.499
4	F	a	00:00.000	03	02	03	01	9	0	00:44.732	00:01.414	00:04.970

3 [Driver Name] [Car: bmw] 4 8 T qual 00:00.000 Giri 10 Settori 0

Lap	Time	Car	Lap	Time	Car	Lap	Time	Car	Lap	Time
0	00:00.000	bmw	0	00:00.000	bmw	0	00:00.000	bmw	0	00:00.000
1	00:02.629	bmw	1	00:07.128	bmw	1	00:03.489	bmw	1	00:03.970
2	00:03.930	bmw	2	00:03.745	bmw	2	00:03.489	bmw	2	00:06.173
			3	00:07.160	bmw	3		bmw	3	00:01.184

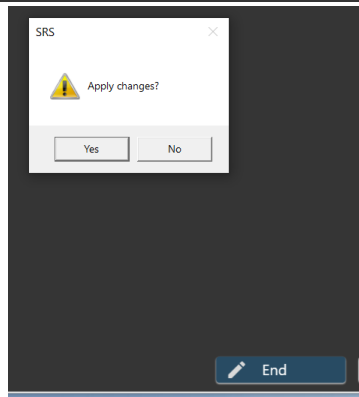
9

10

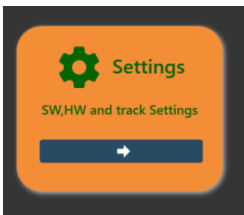
5

6

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



SRS – Setting panel



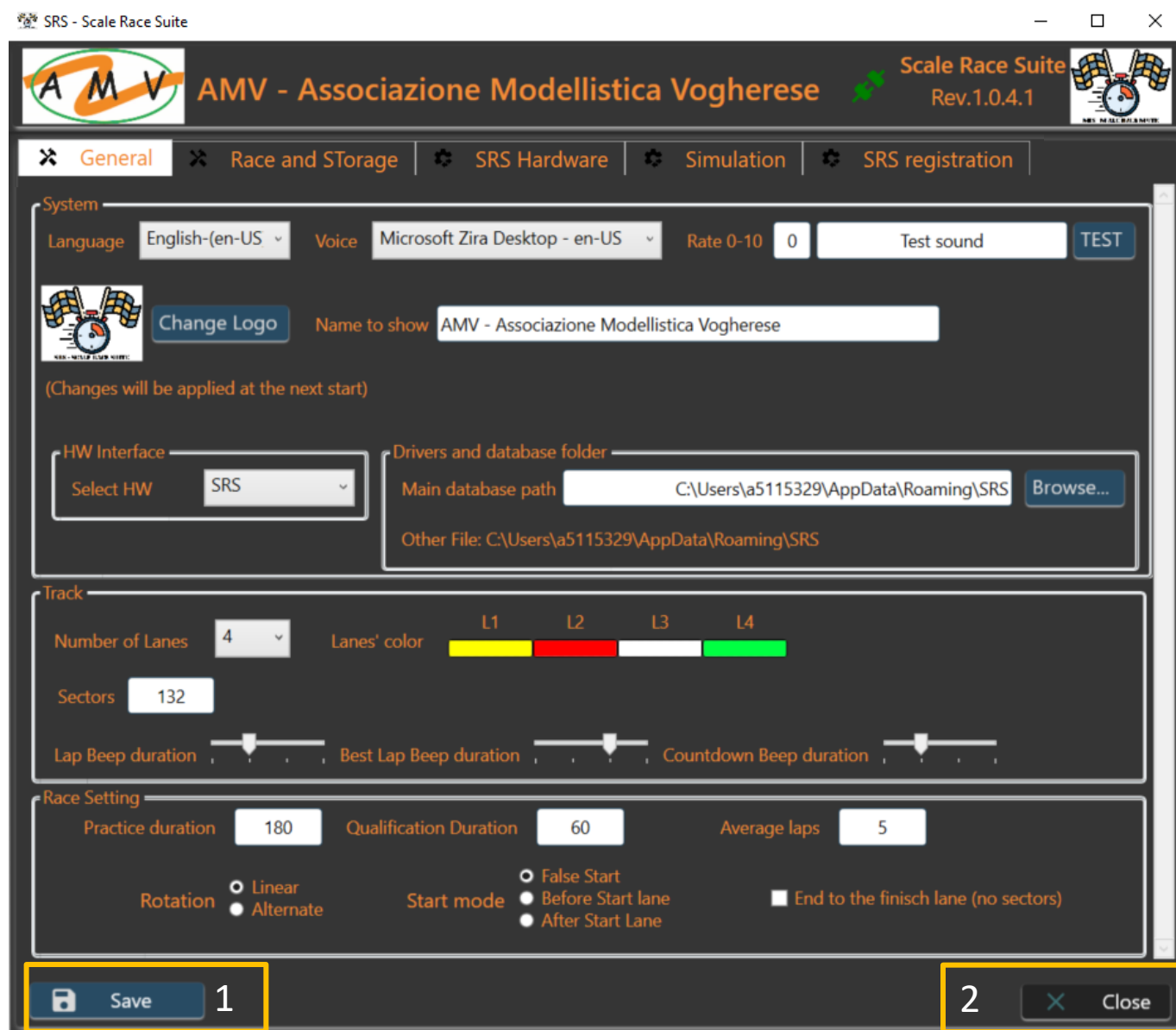
Setting panel is organized in tab related to the different parts of the configuration.

Tabs are:

- **General:** system, track and race parameter setting.
- **Race and Storage:** configuration of categories, points, on-line storage and local storage.
- **SRS Interface:** 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

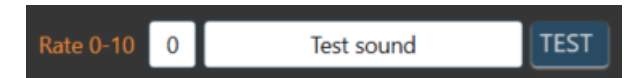
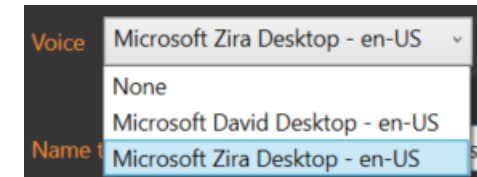
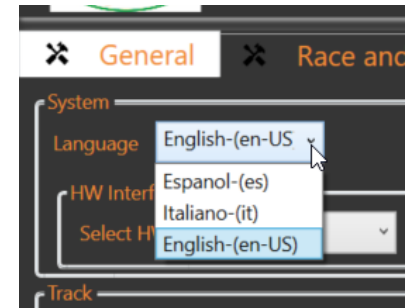
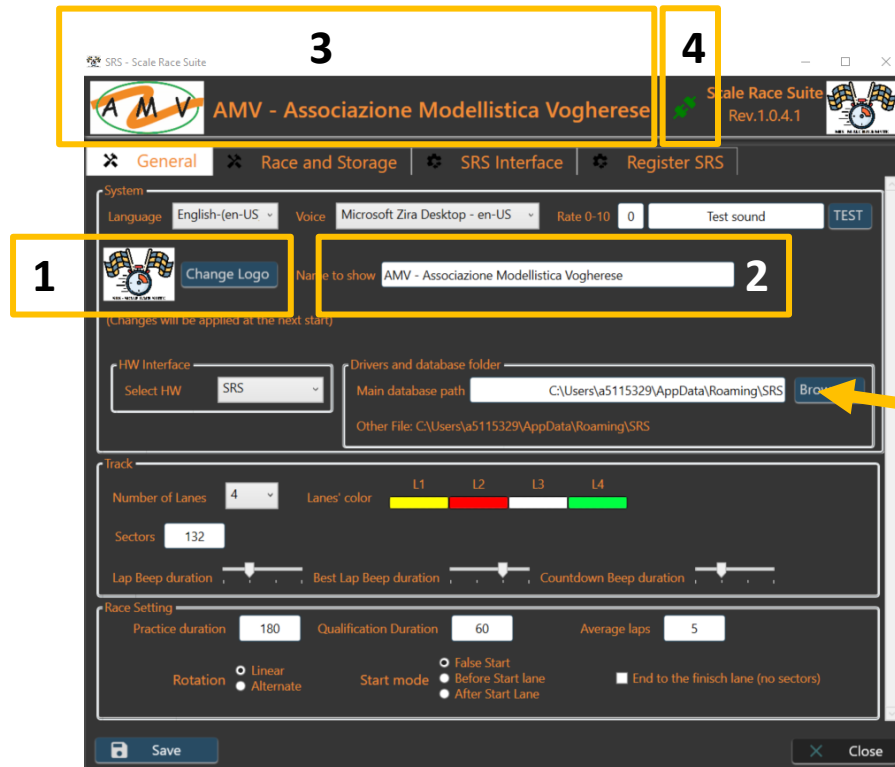


SRS – Setting panel – General Tab

System group

In this group you can select:

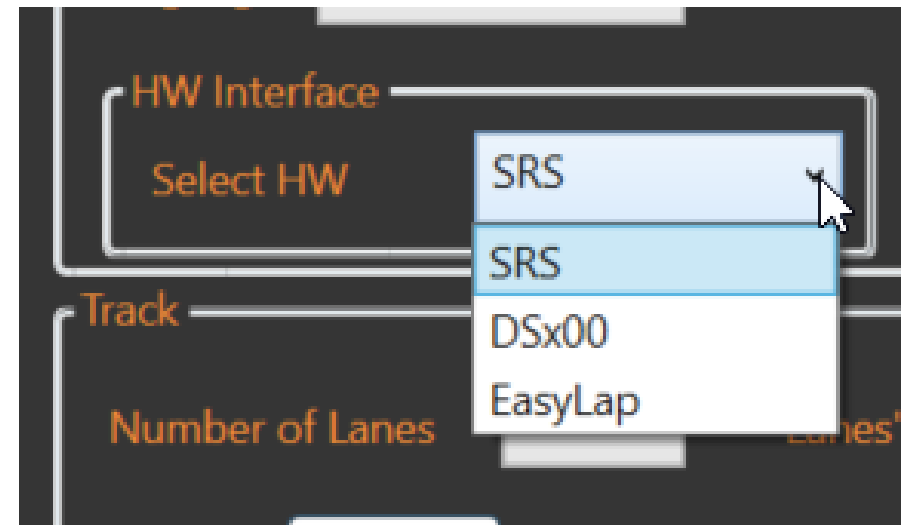
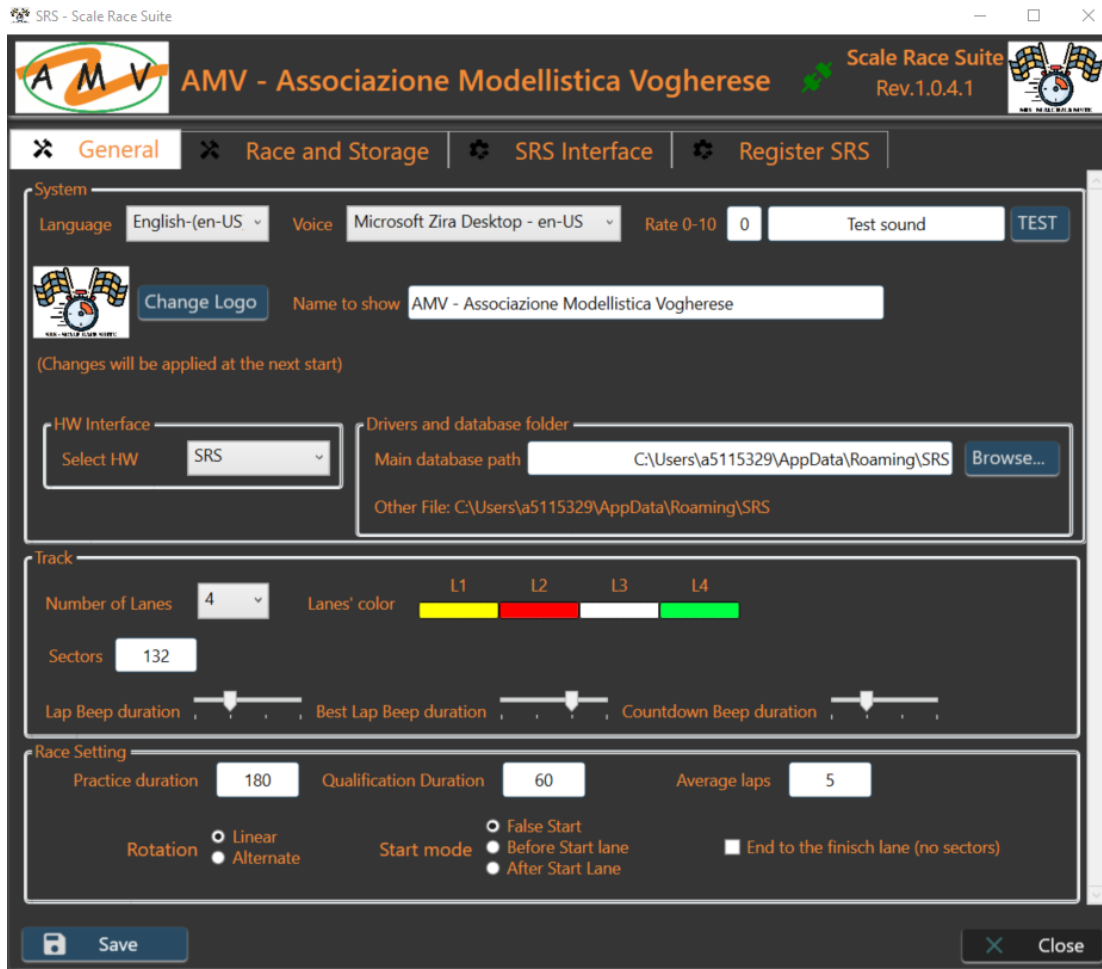
- Language: English and Italian (partially) are ready. Espanol in progress.
- Voice and rate: used to read best time during the race. Leave voice empty for not using the feature.
- Team Logo and Name (1 and 2): can be changed with any logo and description, Update will be applied at the next start
 - 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

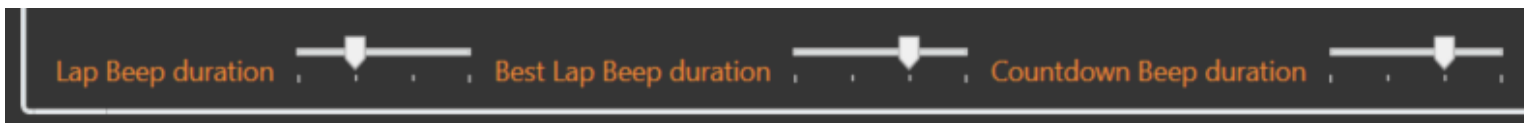
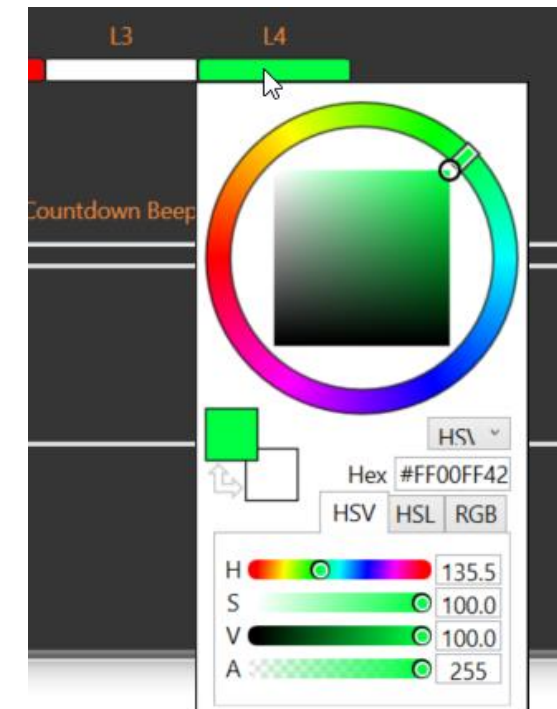
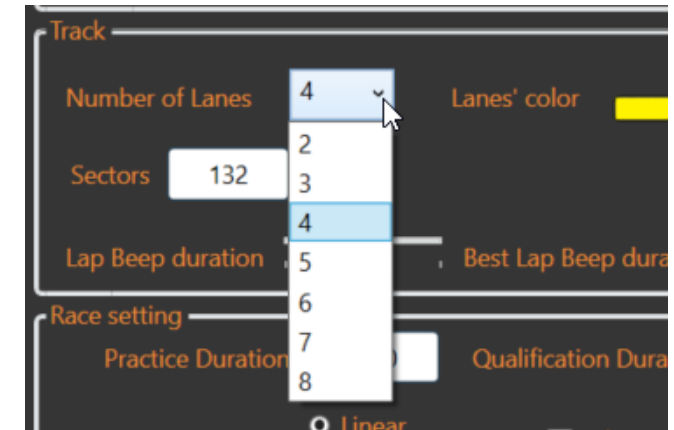


SRS – Setting panel – General Tab

Track group

In this group you can select:

- Numbers of lanes: From 2 to 8. It has been deeply tested with 2 and 4, not yet with other configurations
- 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

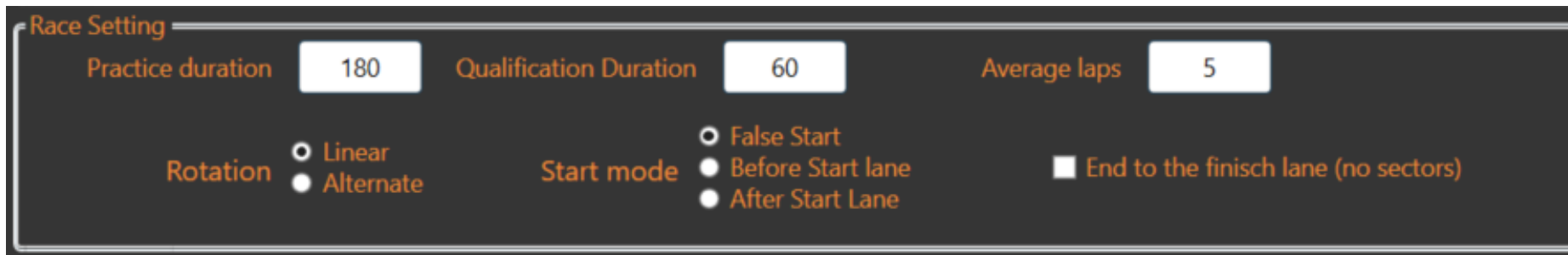


SRS – Setting panel – General Tab

Race setting group

In this group you can select:

- **Practice Duration:** in second it is managed by SRS the duration of the practice section. In this example any 5minutes the time stops, and the power is removed. This is a general setting and can be changed in the practice panel too. A duration of 0sec means no limits.
- **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.
 - After Start Lane: the first trigger is counted as lap

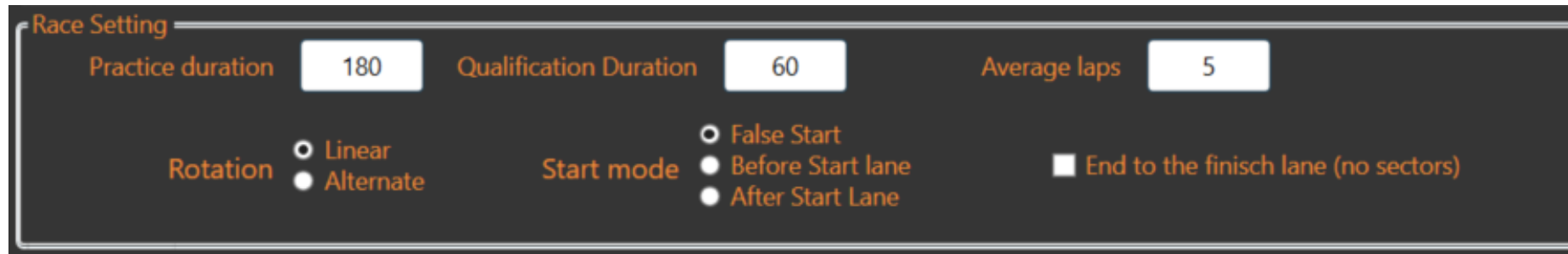


The screenshot shows the 'Race Setting' panel with the following configurations:

- Practice duration: 180
- Qualification Duration: 60
- Average laps: 5
- Rotation: Linear, Alternate
- Start mode: False Start, Before Start lane, After Start Lane
- End to the finisch lane (no sectors)

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.



Race Setting

Practice duration Qualification Duration Average laps

Rotation Linear Alternate

Start mode False Start Before Start lane After Start Lane

End to the finish lane (no sectors)

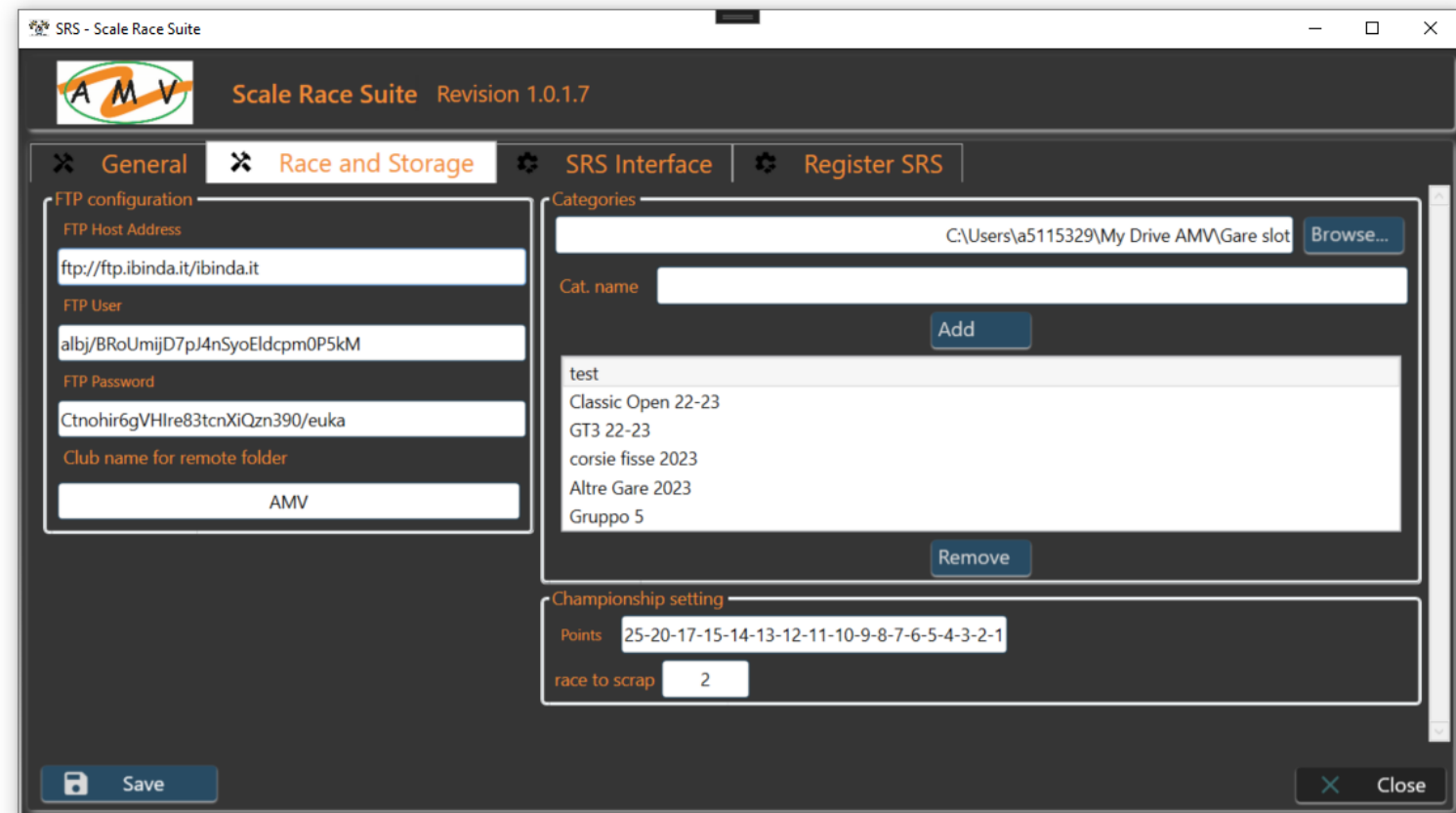
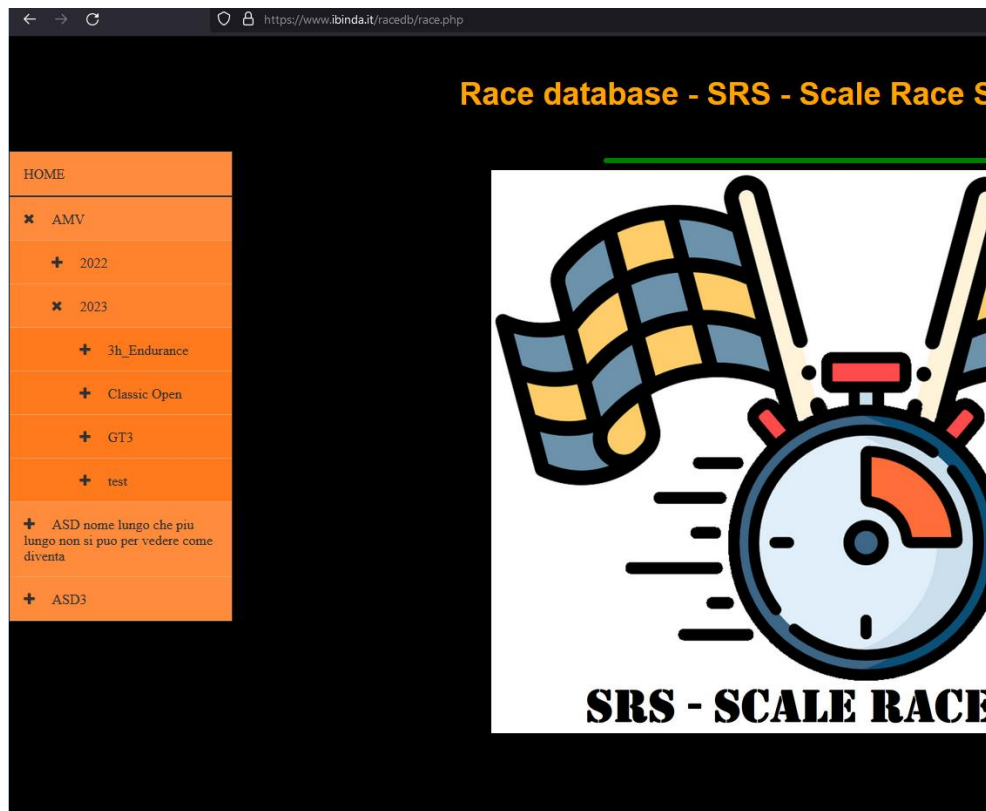
SRS – Setting panel – Race and Storage Tab

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.



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.

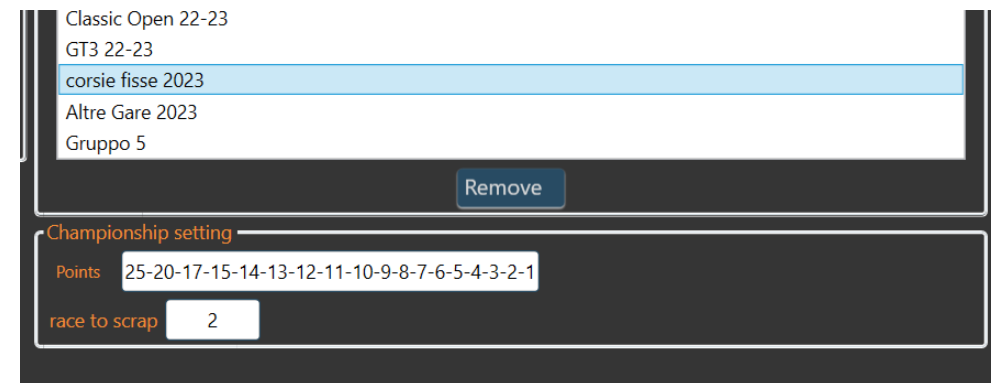
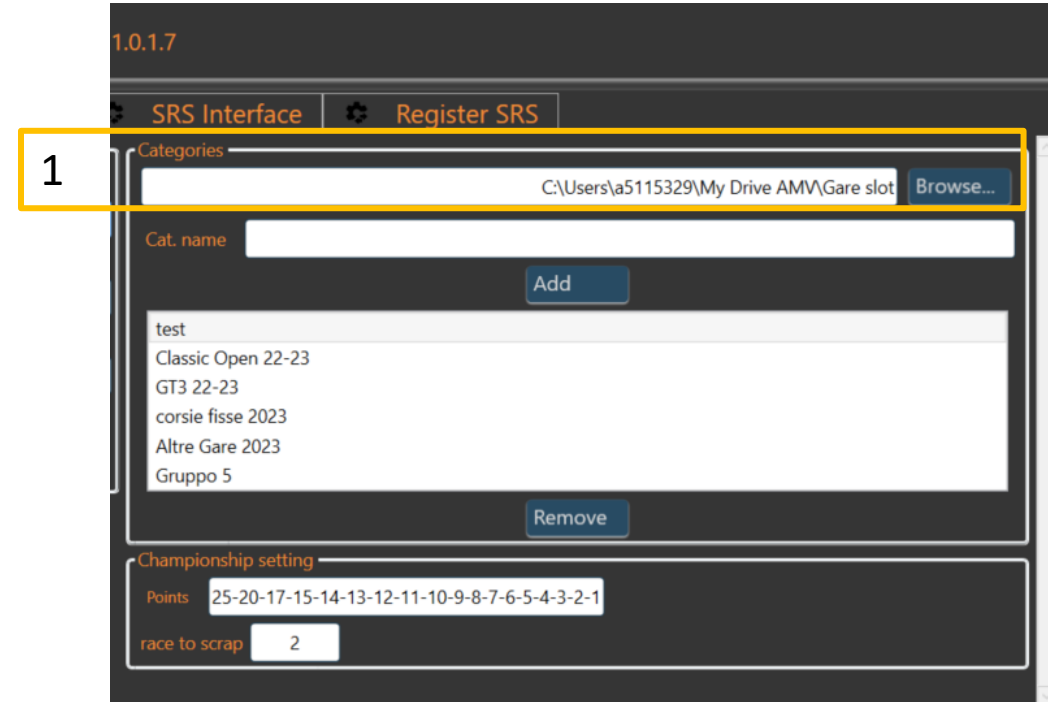
When a new category is added, you can click on it, and you will be able to change the points and scrap race for that category and rank.

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”.

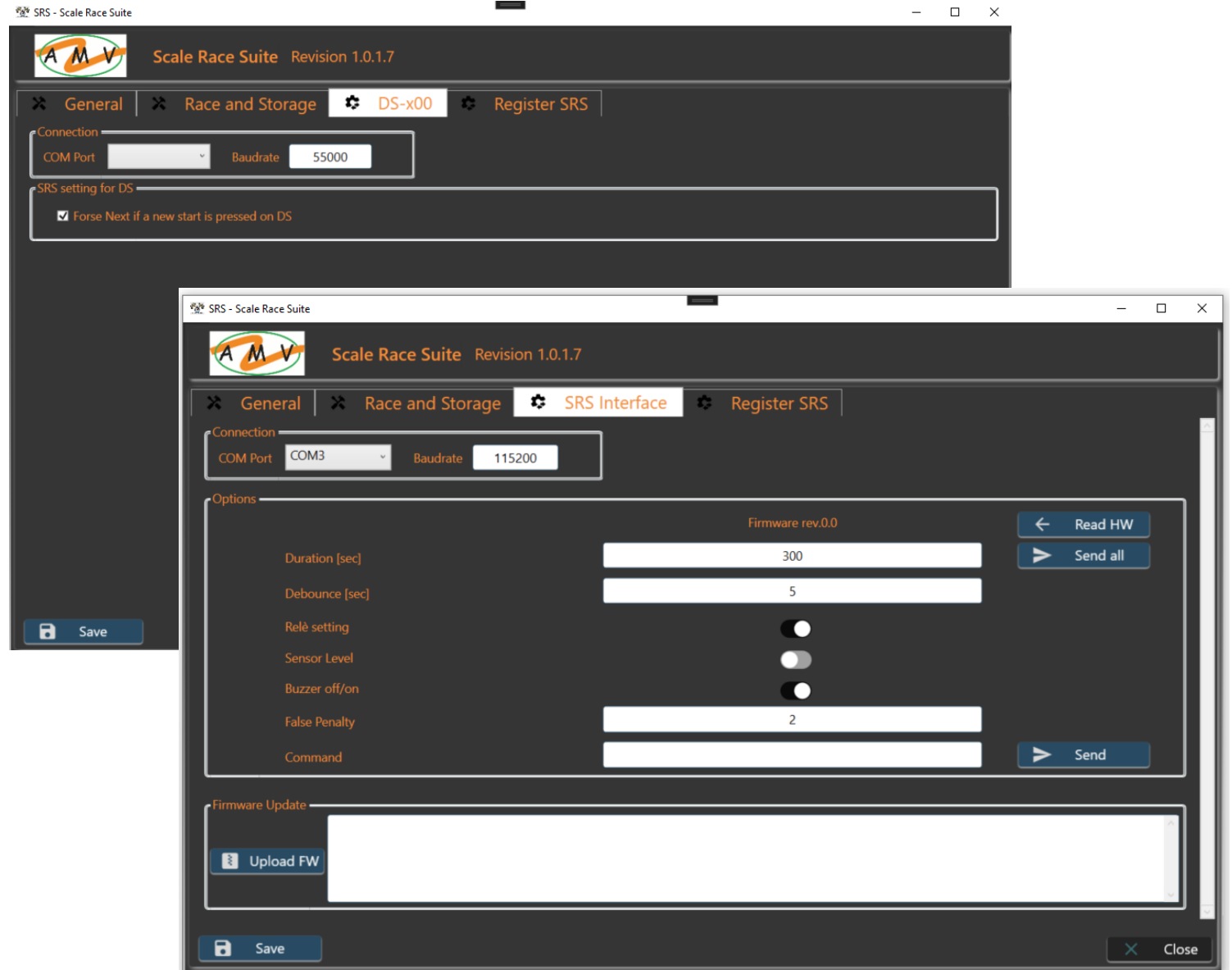
Race to scrap are, in a championship, the number of race to not consider for a general rank, discarding the worst results for each driver. In the example the 2 worst results will be discarded.



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 54000 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).

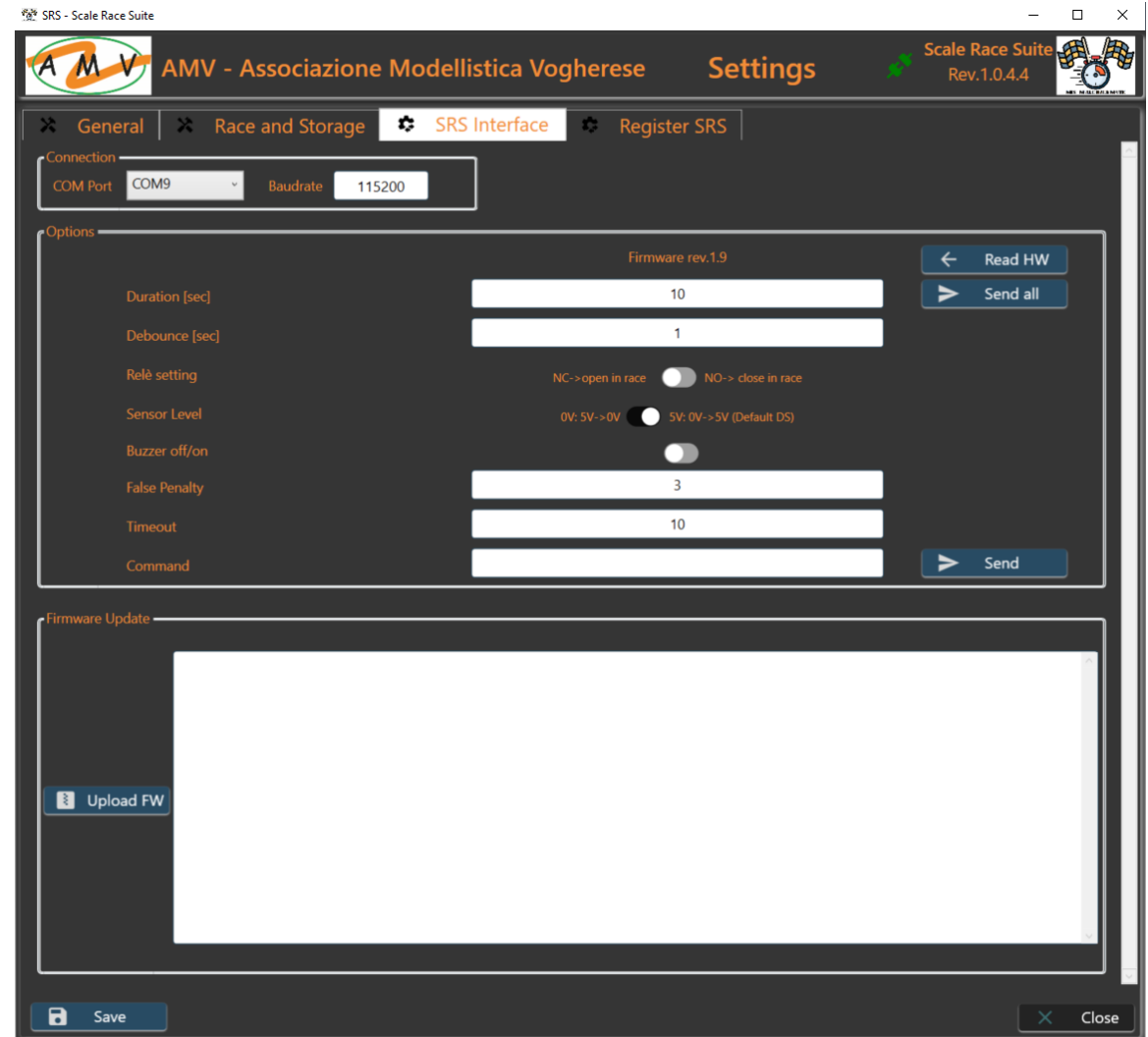
Firmware rev represent the HW/FW version.

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 – Simulation Tab

Simulation

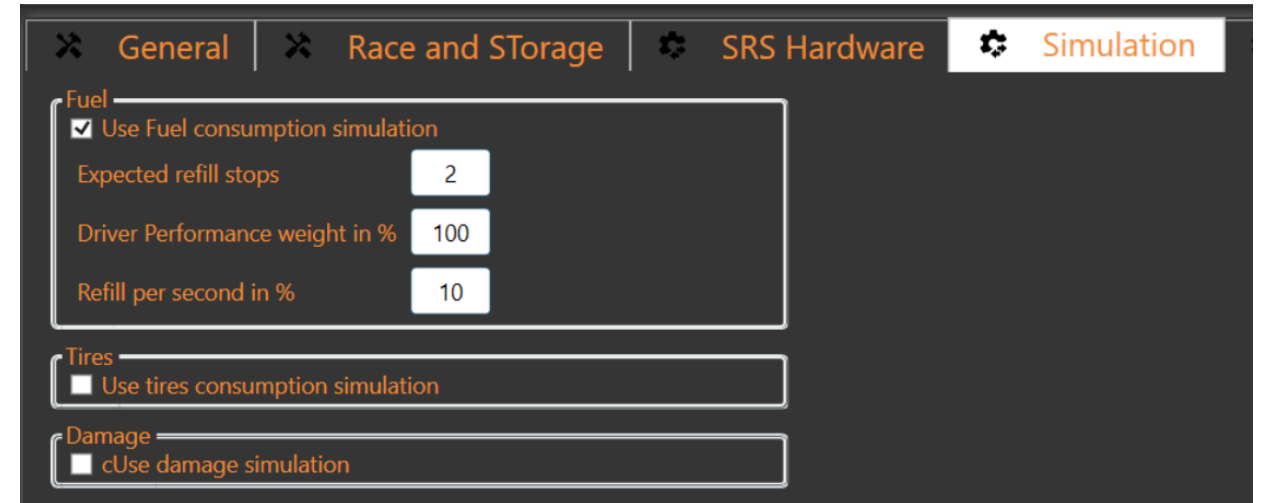
This Tab allows user to simulate real race situations like refill and fuel consumption, tires consumption and random damages.

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 consume per giro minore della media (delta negativo)

→ il pilota veloce ha un consume 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 millisecond) (100% : durataGara in ms = x : consume/g in t (ms)) mentre FuelPerRace e' per scarlo sui rifornimenti richiesti

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

PC lap counter permette di selezionare come soglia il giro secco inserito da textbox.

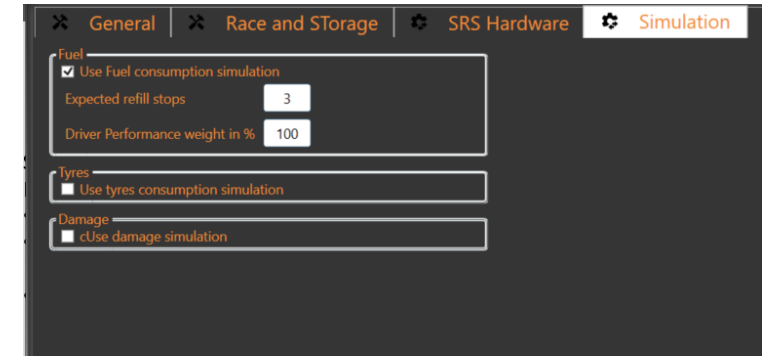
Se svuota il serbatoio Gara finite

Mostrare il consume a giro in % e la stima giri rimanenti????

[Fuel Management for analogic track - Slot Car-Union](#)

Altro da cui ho preso spunto:

[Lap time based fuel simulation - SmartRace for Carrera Digital](#)



SRS – 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 expires the power is removed and a restart is needed.

All the stored info are cancelled.

1. **Best lap time** field
2. **Laps and laps times** for each lane
3. **Power:** when duration is elapsed, you can use this button to power the lanes temporary. Remember to return always to off.
4. **Duration:** practice session duration. A duration of 0sec means no limits
5. **Time Elapsed:** represent the running time of the qualification session for the driver
6. **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.
7. **Close:** exit from the practice panel and return to the main panel. When executed in a separate window, the close button is not present and you exit from the panel clicking the classic windows "x"

SRS - Scale Race Suite

Scale Race Suite Revision 1.0.1.7

Best Laptime	Best Laptime	Best Laptime	Best Laptime
00:03.232	00:03.272	00:03.289	00:03.411
03 - 00:03.688	03 - 00:03.671	03 - 00:03.634	03 - 00:03.464
02 - 00:03.232	02 - 00:03.272	02 - 00:03.289	02 - 00:03.411
01 - 00:02.847	01 - 00:03.387	01 - 00:03.564	01 - 00:03.762

Power Duration (sec) 300 Time Elapsed: 00:00:28 Restart Close

3 4 5 6 7

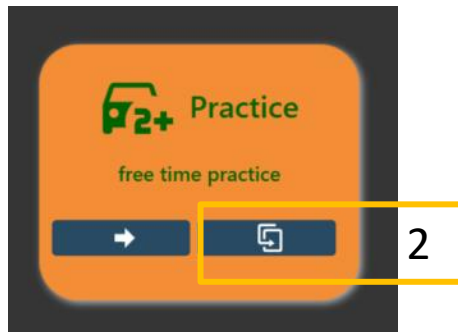
SRS – Practice panel



In the last implementation Practice has also a Best average on consecutive laps (in this case 5 laps) as per the setting parameter Value is shown under the best (1)

Any lane has an X button that can be used to cancel the lane result and reset the single lane

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.

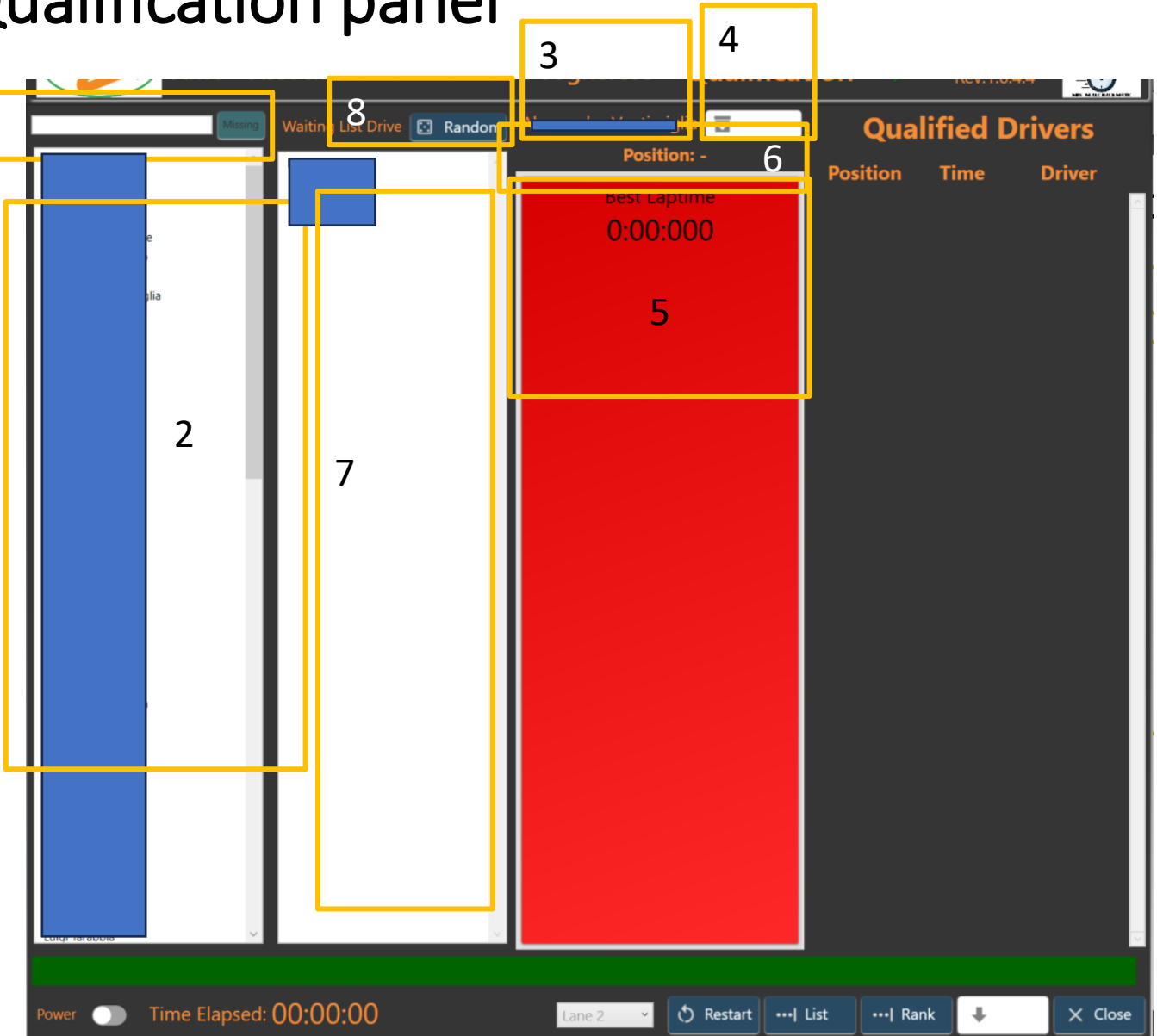


SRS – Qualification panel



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 afterword 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



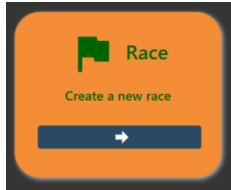
1. **Editable time:** when the driver is in grid and for some reason the qualification time must be changed, double click on the desired line
2. **Time Edi:** you can edit the time and enter a new one. When completed, double click again

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

The screenshot shows the SRS - Scale Race Suite interface. At the top, it says "AMV - Associazione Modellistica Vogherese" and "Qualification". On the right, it says "Scale Race Suite Rev.1.0.5.0". The main area is divided into several sections: "Missing", "Waiting List Drivers:2", "Random", "Macchina", "RC TAG", and "Position 2". The "Position 2" section shows a yellow background with "Best Lapttime 00:02.619" and two lap times: "02 - 00:02.619" and "01 - 00:01.022". The "Qualified Drivers" section is a table with columns "Position", "Time", and "Driver". The table has three rows: 001 with time 02.211, 002 with time 02.619, and 003 with time 02.657. A blue box highlights the "Time" column, and a yellow box highlights the "Time" cell for position 002. A large "1" is visible in the "Driver" column for position 002. At the bottom, there is a "Power" button, "Time Elapsed: 00:00:27", "Lane 1", "List", "Rank", "Race", and "Close" buttons.

A close-up of the "Qualified Drivers" table. The table has columns "Position", "Time", and "Driver". The rows are: 001 with time 02.211, 002 with time 02.619, and 003 with time 02.657. A yellow box highlights the "Time" cell for position 002, and a white box with the number "2" is overlaid on it, indicating the new position.A close-up of the "Qualified Drivers" table after editing. The table has columns "Position" and "Time". The rows are: 001 with time 02.211, 002 with time 02.657, and 003 with time 01:04.619. The order of the rows has changed, and the time for position 003 is now 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

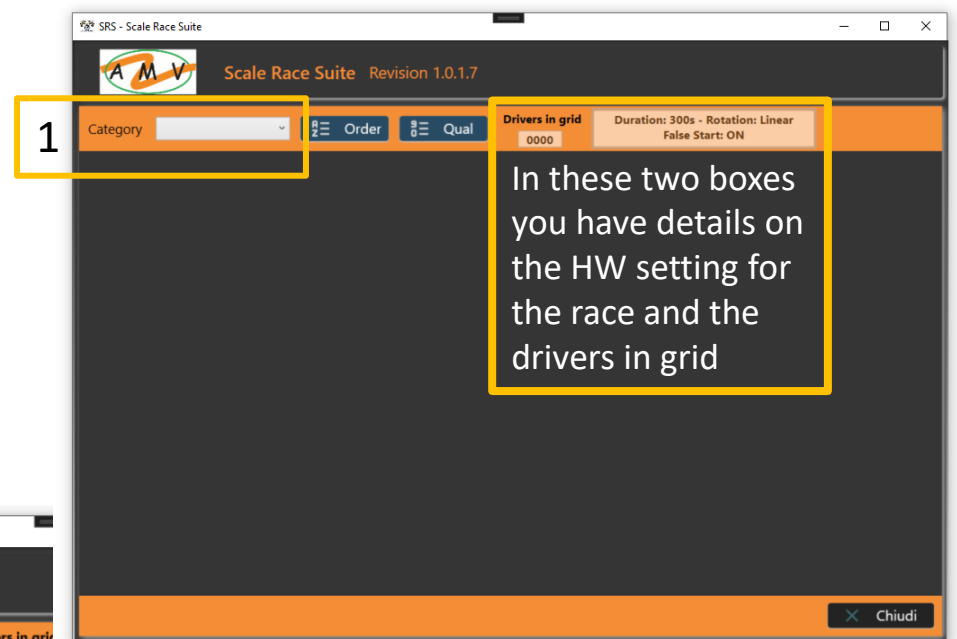
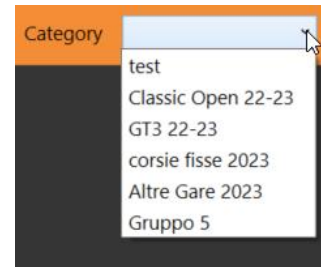
Order (4) and **Qual (5)** buttons are used to reorder the list ordering by Session (4) or qualification time Tqual (5). Any time you click the button you invert the order

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

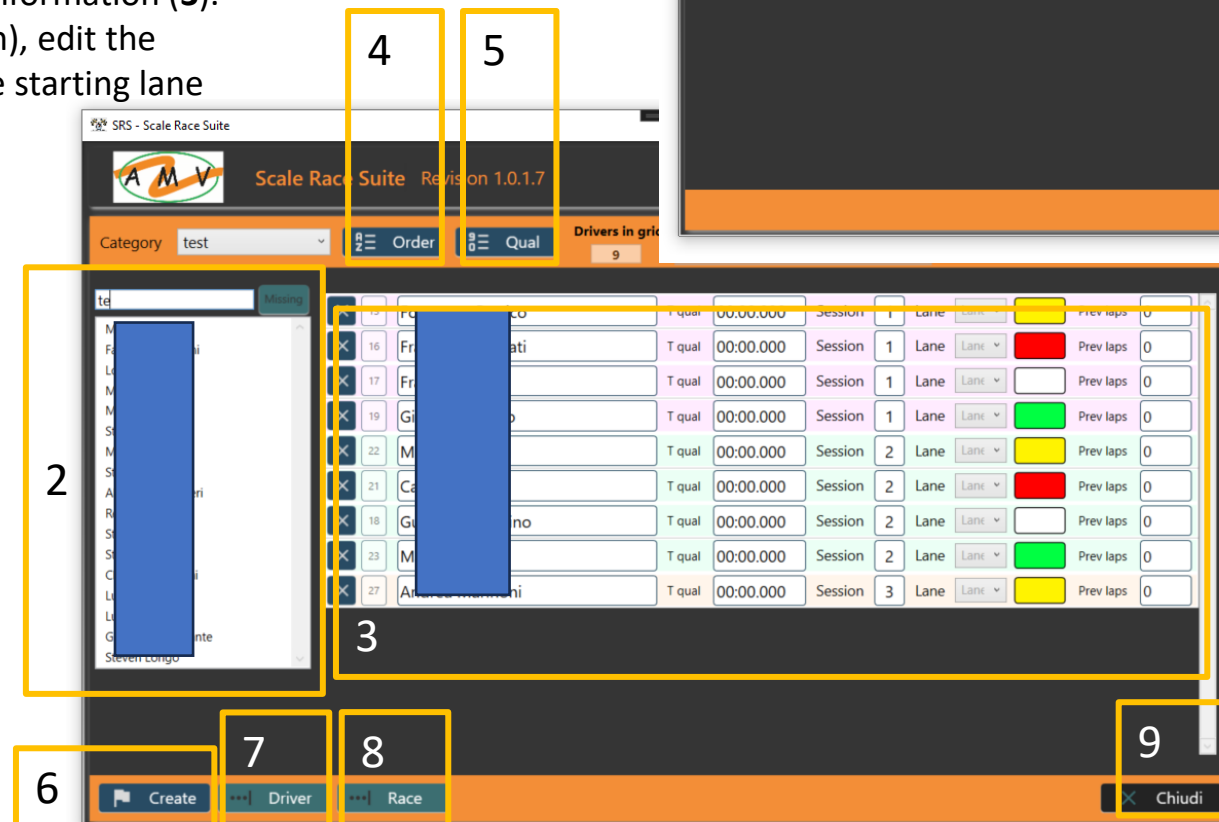
If you have a previous drivers list, you can use the **Driver** button (7) to load it.

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



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



2

4

5

3

6

7

8

9

SRS – Race panel



Race Panel

1

SRS - Scale Race Suite

Time: 00:00:20

Remaining: 00:00:20

Driver	Best Lap Average	Last Lap Delay	Lap Total	Proj Endu	Rank Delay
Fa C	-	-	0	0	0
Fa C	00:00.000	00:00.000	0	-	00:00.000
Fa C	-	-	0	0	0
Fa C	00:00.000	00:00.000	0	-	00:00.000
Fa C	-	-	0	0	0
Fa C	00:00.000	00:00.000	0	-	00:00.000

3

4

Power

Session 1/1 Manche 1/4 WaitDS More + Add Lap X Close

Practice Panel (rally/ slot with transponder)

Test view for a possible rally race or slot race practice with transponder or MiniZ

SRS - Scale Race Suite Revision 1.0.1.6

Best tempo/giro 0:00:00 Best media 0:00:00	Best tempo/giro 0:00:00 Best media 0:00:00	Best tempo/giro 0:00:00 Best media 0:00:00	Best tempo/giro 0:00:00 Best media 0:00:00	Best tempo/giro 0:00:00 Best media 0:00:00	Best tempo/giro 0:00:00 Best media 0:00:00	Best tempo/giro 0:00:00 Best media 0:00:00	Best tempo/giro 0:00:00 Best media 0:00:00
Best tempo/giro 0:00:00 Best media 0:00:00	Best tempo/giro 0:00:00 Best media 0:00:00	Best tempo/giro 0:00:00 Best media 0:00:00	Best tempo/giro 0:00:00 Best media 0:00:00	Best tempo/giro 0:00:00 Best media 0:00:00	Best tempo/giro 0:00:00 Best media 0:00:00	Best tempo/giro 0:00:00 Best media 0:00:00	Best tempo/giro 0:00:00 Best media 0:00:00

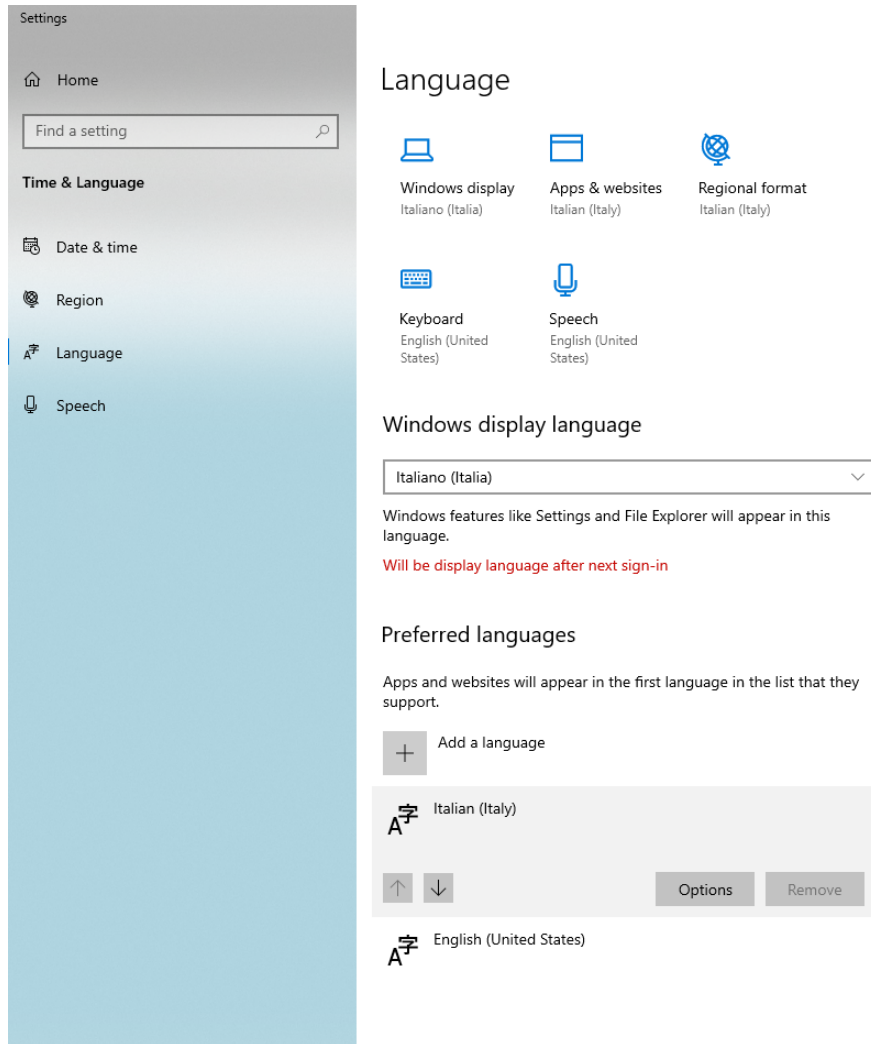
Durata (sec) 300 Tempo trascorso: -

Azzera Chiudi

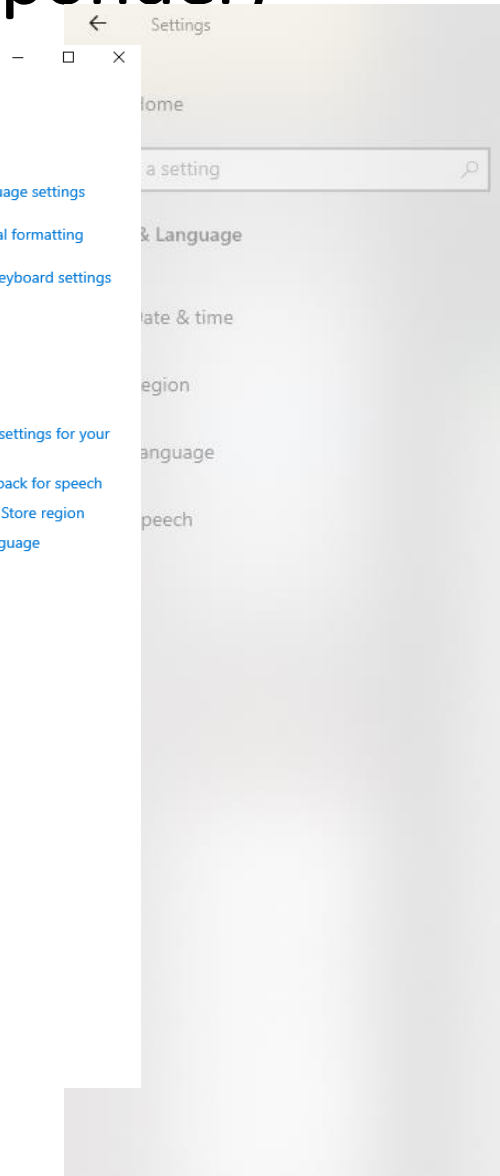
Output

```
Show output from: Debug
'SRS.exe' (CLR v4.0.30319)
Exception thrown: 'System.Exception' in 'SRS.exe'
'SRS.exe' (CLR v4.0.30319)
Exception thrown: 'System.Exception' in 'SRS.exe'
'SRS.exe' (CLR v4.0.30319)
Exception thrown: 'System.Exception' in 'SRS.exe'
'SRS.exe' (CLR v4.0.30319)
Exception thrown: 'System.Exception' in 'SRS.exe'
StringResources.es.xaml
Espanol-(es)
StringResources.it.xaml
Italiano-(it)
'SRS.exe' (CLR v4.0.30319)
StringResources.xaml
English-(en-US)
'SRS.exe' (CLR v4.0.30319)
'SRS.exe' (CLR v4.0.30319)
'SRS.exe' (CLR v4.0.30319)
'SRS.exe' (CLR v4.0.30319)
'SRS.exe' (CLR v4.0.30319)
'SRS.exe' (CLR v4.0.30319)
'SRS.exe' (CLR v4.0.30319)
'SRS.exe' (CLR v4.0.30319)
'SRS.exe' (CLR v4.0.30319)
'SRS.exe' (CLR v4.0.30319)
The thread 0x7500 has exited.
'SRS.exe' (CLR v4.0.30319): SRS.exe: Loaded 'C:\WINDOWS\Microsoft.NET\assembly\GAC_MSIL\UIAutomationTypes\v4.0.4.0.0__31bf3856ad364e35\UIAutomationTypes.d11'.
```

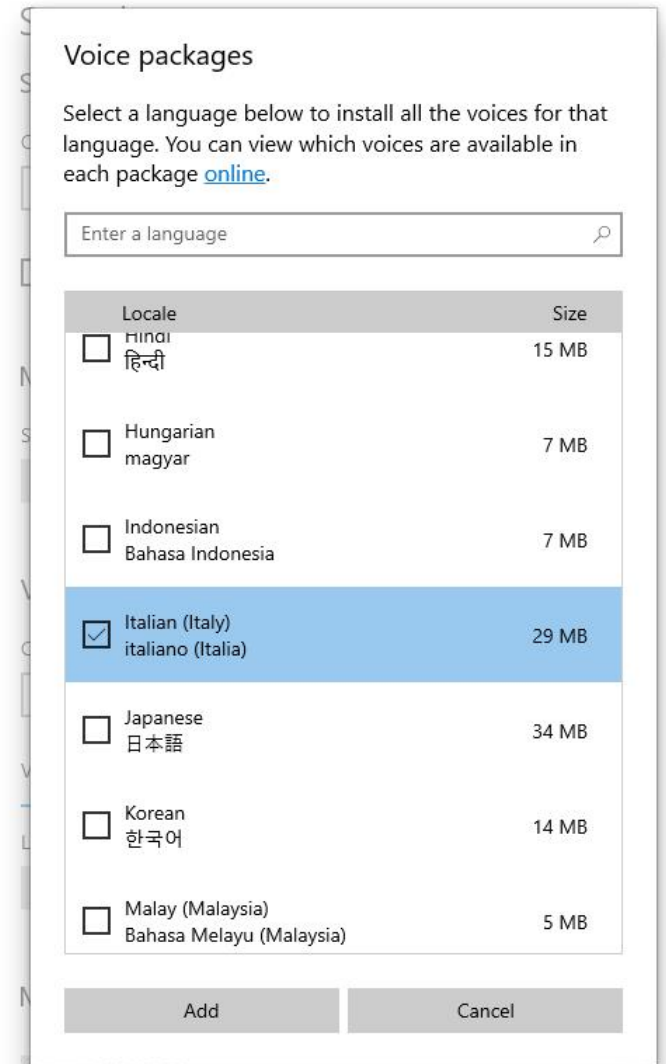
Practice Panel (rally/ slot with transponder)



The screenshot shows the Windows Settings application with the 'Language' section selected in the left-hand navigation pane. The main content area is titled 'Language' and includes several sections: 'Windows display language' (set to Italiano (Italia)), 'Preferred languages' (listing Italiano (Italy) and English (United States)), and 'Related settings' (with links to Administrative language settings, Date, time & regional formatting, Spelling, typing, & keyboard settings, Sync your settings, and Help from the web). A search bar is visible at the top of the settings page.



This screenshot is similar to the previous one but features a semi-transparent search bar overlay at the top of the settings window. The search bar contains the text 'a setting' and has a magnifying glass icon on the right. The background settings are dimmed.

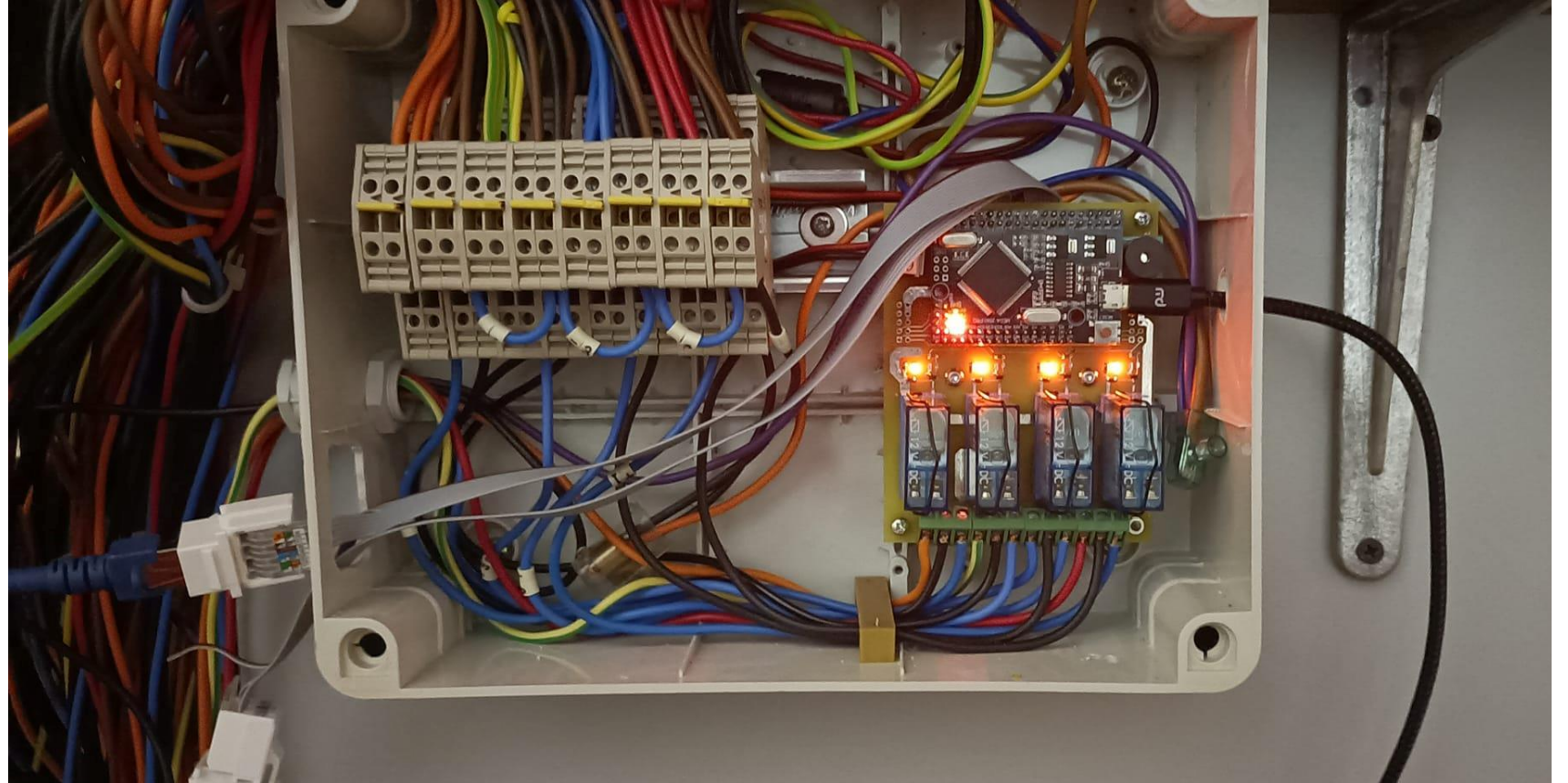


The screenshot shows a 'Voice packages' dialog box. It prompts the user to 'Select a language below to install all the voices for that language. You can view which voices are available in each package [online](#).' Below the text is a search bar with the placeholder 'Enter a language'. A table lists various language packages with their respective sizes. The 'Italian (Italy)' package is selected with a checkmark. At the bottom of the dialog are 'Add' and 'Cancel' buttons.

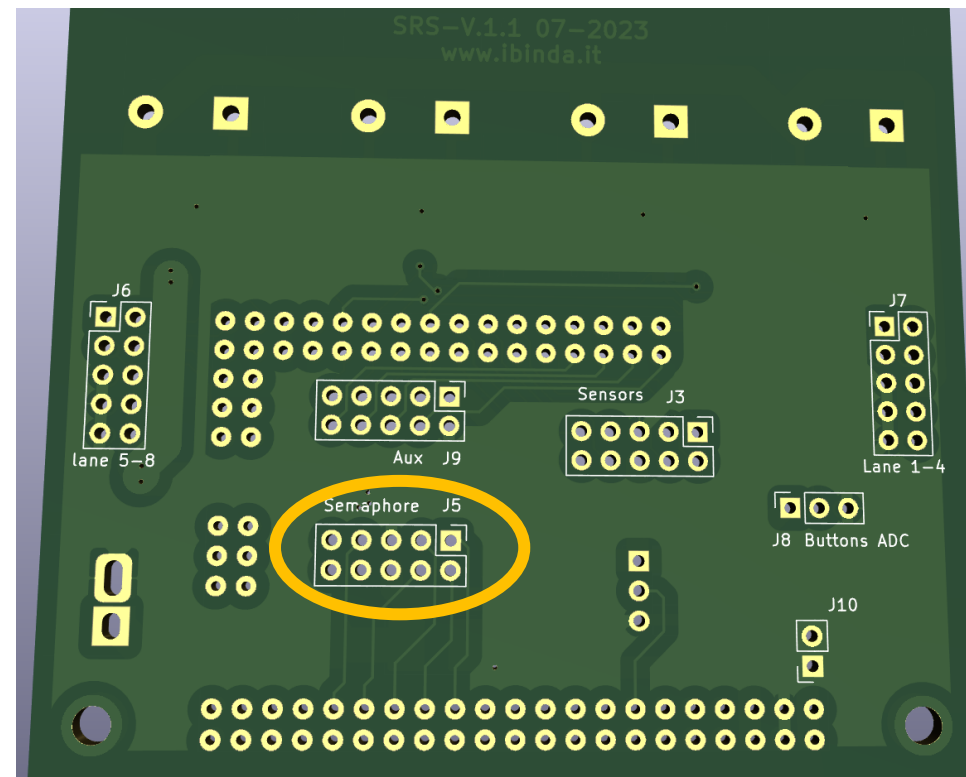
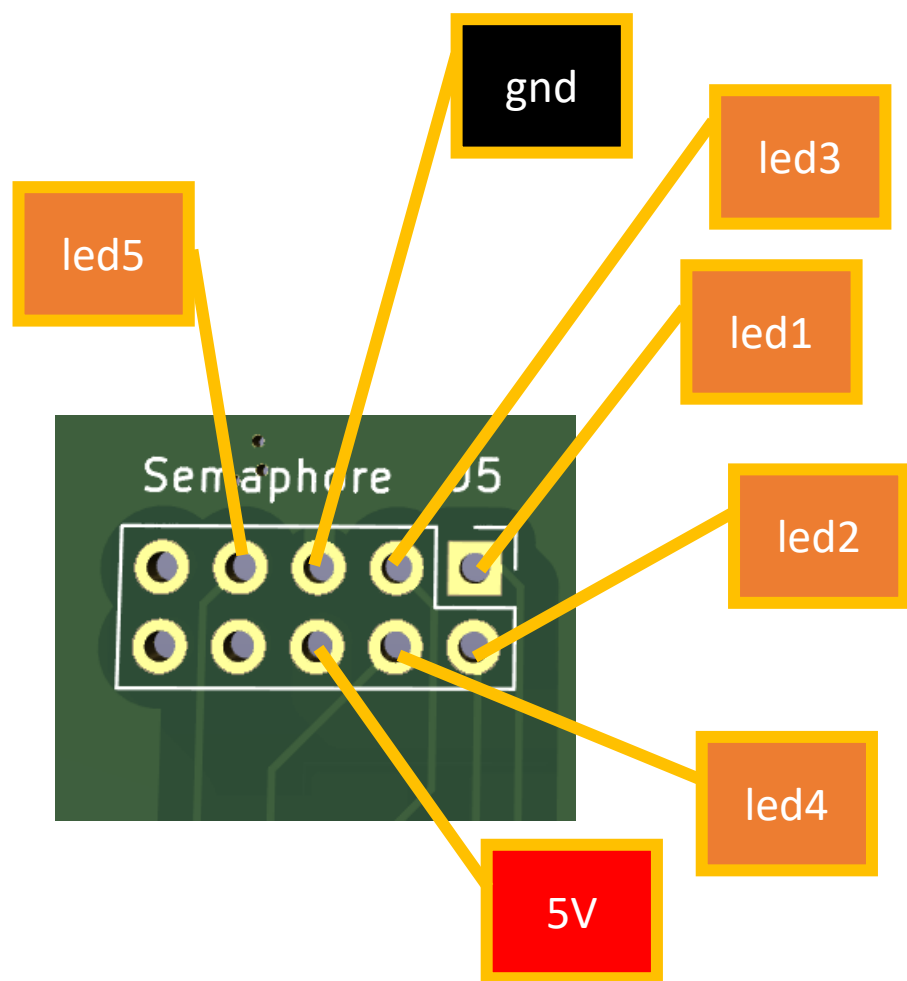
Locale	Size
<input type="checkbox"/> Hindi हिन्दी	15 MB
<input type="checkbox"/> Hungarian magyar	7 MB
<input type="checkbox"/> Indonesian Bahasa Indonesia	7 MB
<input checked="" type="checkbox"/> Italian (Italy) italiano (Italia)	29 MB
<input type="checkbox"/> Japanese 日本語	34 MB
<input type="checkbox"/> Korean 한국어	14 MB
<input type="checkbox"/> Malay (Malaysia) Bahasa Melayu (Malaysia)	5 MB

SRS hardware (rele' box)

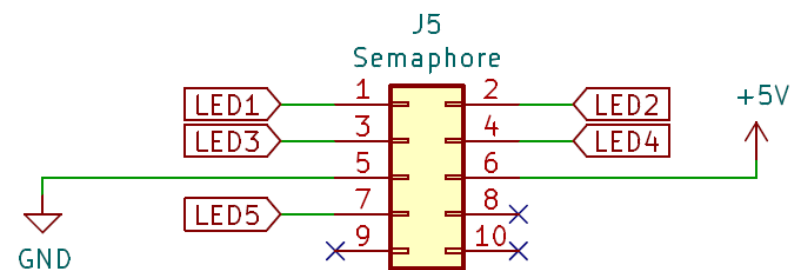
Transponder
integration for slot
racing should allow
to drive the rele'
box
For rally and Mini Z
is not needed.



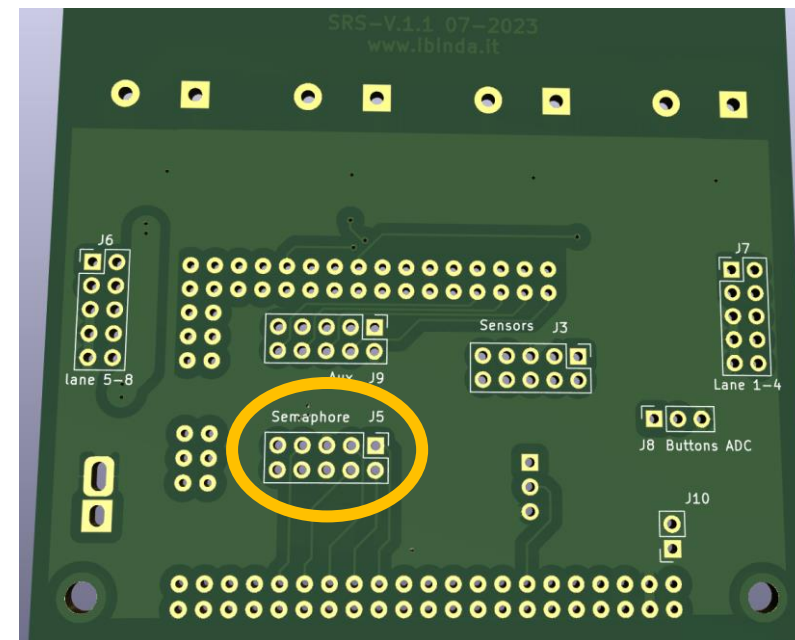
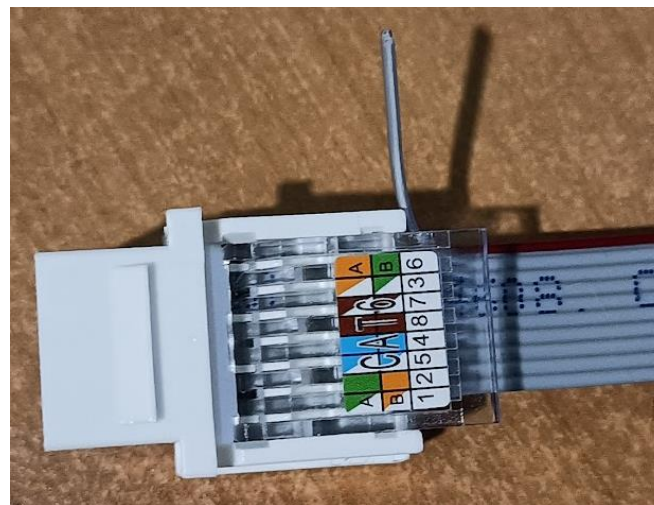
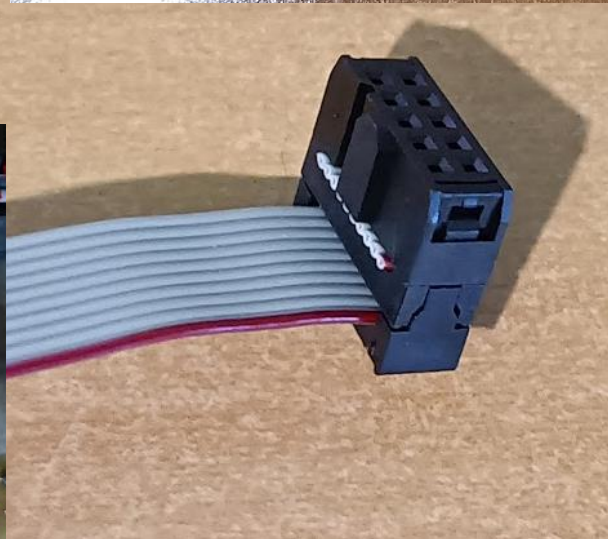
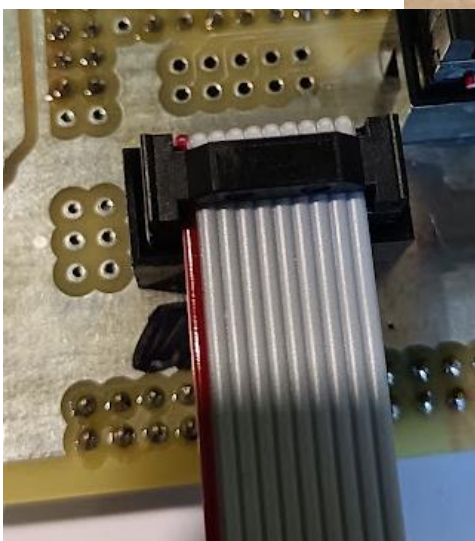
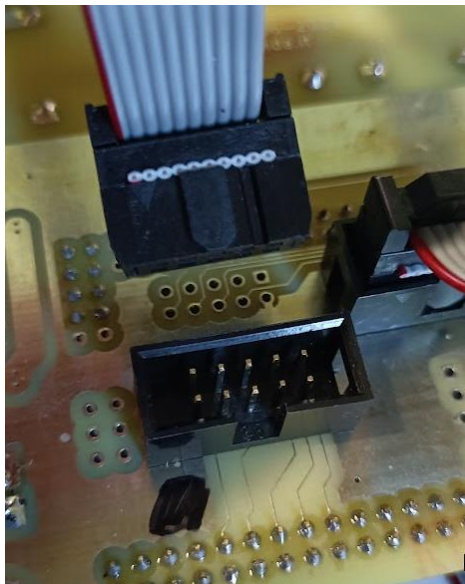
SRS Semaphore connection



Semaphore LEDs connection on the PCB bottom.



SRS Semaphore connection cable

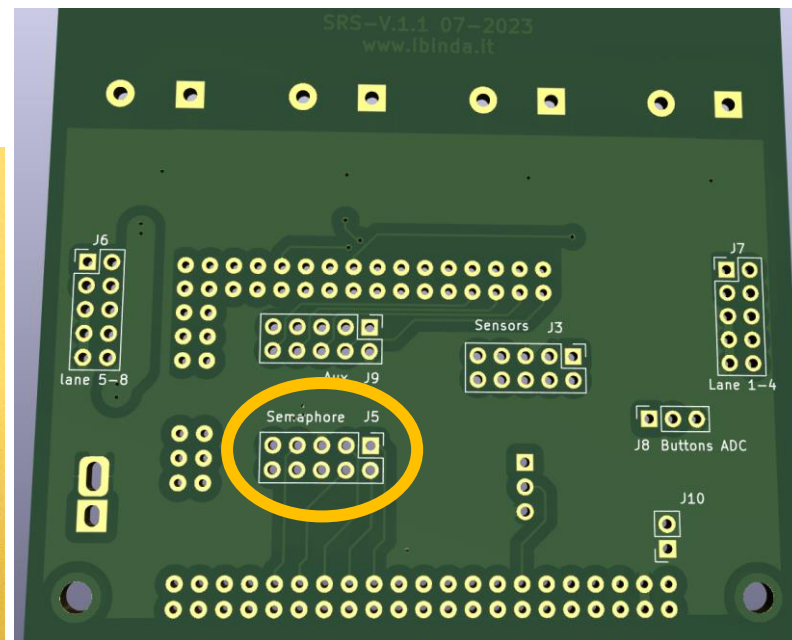
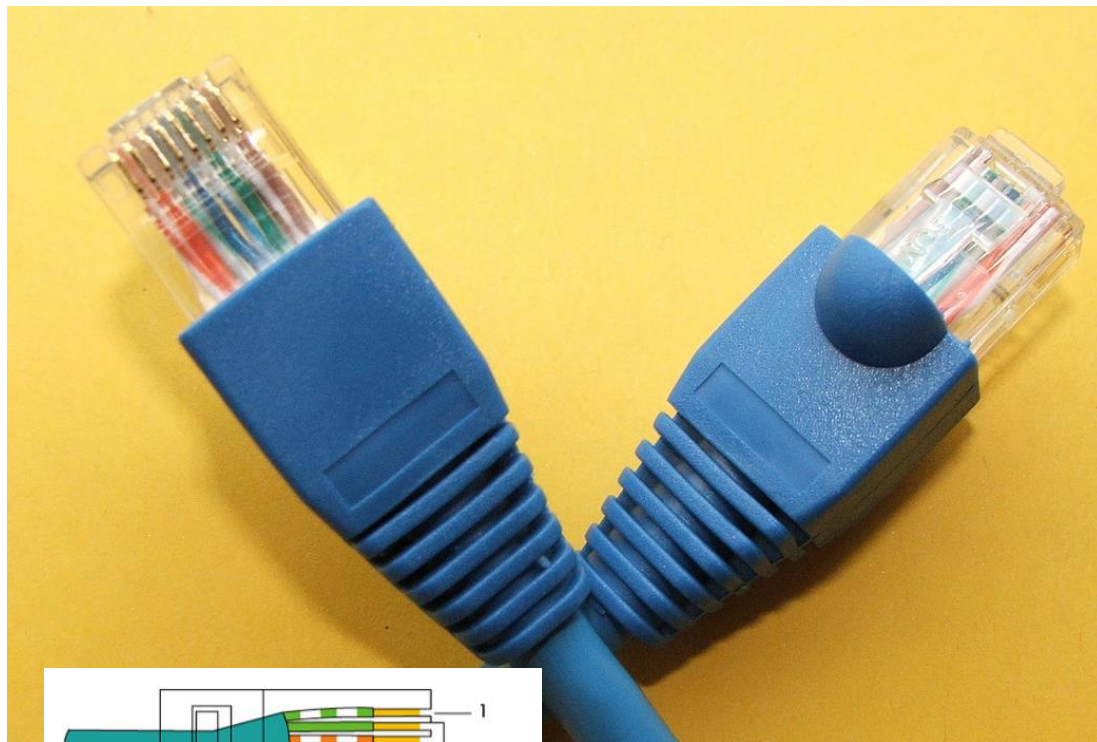


The red and the one after are not connected.

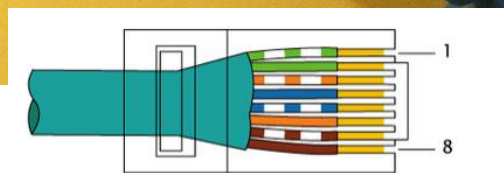
In the CAT6:

- 1: LED1
- 2: LED2
- 5: LED3
- 4: LED4
- 8: GND
- 7: 5V
- 3: LED5
- 6: NC

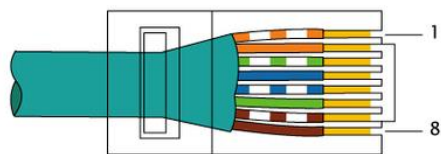
SRS Semaphore connection cable



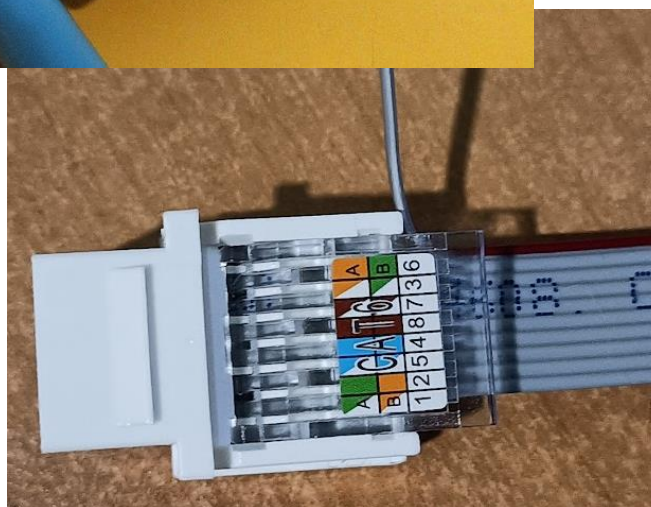
The red and the one after are not connected.



EIA/TIA-568A



EIA/TIA-568B

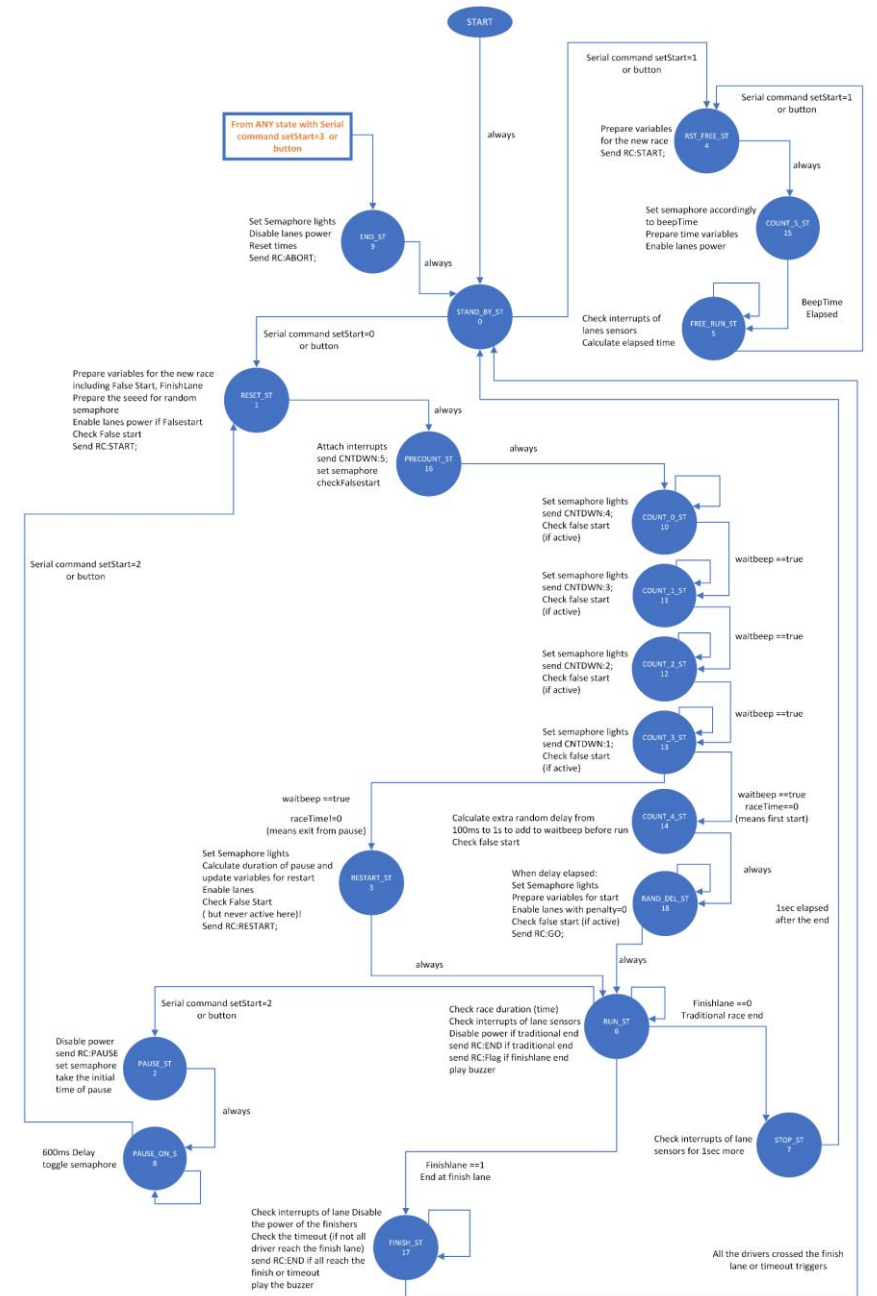


In the CAT6:

- 1: LED1
- 2: LED2
- 5: LED3
- 4: LED4
- 8: GND
- 7: 5V
- 3: LED5
- 6: NC

SRS hardware - FW

Here is represented the general state machine of the FW used in SRS HW
Others details like real time events, fuel and communication are described in the FW itself
COM can be also address with terminals @ 115200bps
“Help” shows some information



Thank you

