



Race manager software for slot tracks



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ver. 2.2.8.0 (10/2021)

SOFTWARE INSTALLATION AND HARDWARE CONNECTION

For a correct program functioning, it's better to install it in the default path (**c:\BistLap_A**). The software doesn't add any keys on Windows register so, for an eventual uninstallation, just delete the folder containing the program. You must have installed Microsoft .NET Framework 4.5.2.

You must have a 1366x768 screen resolution or better (minimum 1024*768, or else some time screen elements may be cutted off from the screen). It is advisable to install the "VIENNAHY" font in the folder "**c:\BistLap_A\Tools**".

ALERT: Must use the program as Administrator (right click on the icon and "Run as Admin", or else set in Properties ☐ Compatibility ☐ Run as Admin), also select "Disable screen scaling for high DPI values" (in case the menu is shown as cutted) in Properties ☐ Compatibility.

CONNECTING BISTBOX:

BistBox, the hardware component managed by BistLap, is able to detect times with millisecond precision and manage the power supply of the track.

- 1) In **C:\BistLap_A\Tools\drivers\BistBox** there are BistBox's drivers. It is possible to connect Bistbox and, at the installation, sign this path for its drivers if not automatically recognized by the system.
 - 2) Connect Bistbox and wait for its boot up (wait for 10/15 seconds).
 - 3) Start the BistLap_A software and do the automatic research.
 - 4) If BistBox **doesn't** automatically get detected, you have to check which COM port it is associated with on Windows Control Panel (in "Device management" section) and report it in the "**BistLap_A**" program. After that, you have to press on "Connect Bistbox".
- If BistBox **doesn't** still get detected, you must follow the **recovery procedure**: digit "**sosbist**" on the "Track length" field and follow the video instructions (It is necessary to have installed the drivers from point 1).
- 5) Save the configuration.

ALERT: It would be better to connect BistBox always at the same USB door because the system could assign a different COM door for every changing (and every time you would redigit it in the BistLap program).

CONFIGURATION FILE: BistLap uses 2 files to save the configuration, **config.cfg** for the menu settings, and **conftab.cfg** (see [page 18](#)) for the time screen settings. The first file (**config.cfg**) is generated at the first press of 'save configuration'. The second one (**conftab.cfg**) is generated at the first change made from the 'configuration' menu on the time screen.

CUSTOM LOGO: There's an image file in the main folder, named '**Logo170x80.jpg**', that appears on both the pause screen (the one with the stoplight) and the final standings screen. If you want, you can replace it with a custom logo. '**Logo160x340.jpg**' only appears in the summary screen of an Advanced Race. This logo too can be changed with a custom one too.

SOUND EFFECTS: In the installation folder there's a SFX subfolder in which the various sounds used for many events in the software are saved. Every sound can be activated (or not) from the configuration menu of the time screen. In every case it's possible to customise them replacing the original sounds, but keeping the same file name.

Here you have the functions description, in the menu order.

MAIN MENU

CONFIGURATION

Configuration Race Option Race Advanced BistBox

COM-Port IT

EN

Length (cm): Min. lap time (ms):

Additional sensors configuration

SpeedTrap at end of sector: ☐ 1 ☐ 2 ☐ 3

	s3	s4	s5	s6	s7	s8	
Lane 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ID of sensor is at default ID of lane. At Lanes 5-6 you can't assign additional sensors
Lane 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lane 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lane 4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

☐ doppia

☐ Voice

Set the track length for the average speed calculation. The average speed is real and can be seen in km/h. You can decide to apply a multiplier to have in-scale values. For example: if you want to turn a 15 km/h speed and see 250 km/h you must edit the **"configtab.cfg"** file changing the **"convvel:"** field, inserting 16.667 instead of 1 ($15 \times 16.667 = 250$).

Setting the minimum lap time (interdiction time) is really important for the lap's calculation to avoid fake activations or faked laps.

In this page you can set the Bistbox connected sensors highlighting which lane the numbered sensor is assigned to. For example you can set the "s5" sensor as an additional sensor for the lane 1, so for every passing on the sensor 5 you have a split time for the lane 1.

Press **"VALIDATE"** after the configuration to confirm. Remember to eventually save the general configuration.

The flag **"double"** only can double the number of additional sensors, connecting more sensors together in series (not the finish line ones, they must remain unique). This option can be comfortable for split times additioning.

You also can set a **speed-trap**: first, you must tell which additional sensors are connected to the lane, then you must tell in which sector end is the speed-trap. For example, configuring a 2-lanes track with s3-s5 sensors for lane 1 and s4-s6 for lane 2, indicating a speed-trap at the end of the first sector, a split time will be counted at the passing between s3 and s5 together with speed detection. You must set the **'mtSpTrap'** field in the **"confTab.cfg"** file (page 18), inserting the distance using metres (15 cm = 0,15 m).

In this menu, there also are quick link to three folders of the program: images, telemetry and screenshots. With a similar configuration to the one in the image above, it means that there are 4 finish line sensors and the 5-6-7-8 sensors are assigned respectively to lanes 1-2-3-4 as additional. The speed-trap flag = 1 means that these sensors only can detect maximum speed (calculated between them and the finish line).

"BistApp" button sends the automatic configuration of the PC program to the Android app (see page 16).

"VOICE" option activates or disables the vocal alerts during sessions, like fuel/energy level, fastest laps, the driver who's leading the race etc etc... (see the **"configTab"** file to enable lap time announcement in every free practice lap).

ALERT: the vocal synthesizer is the system's default, so you must select the wanted voice from Windows control panel.

In Windows 7 the default "voice" is the English one, you can install a different language for the voice downloading it from the site www.bistlap.it in the "Download" section.

SESSION SETTINGS

Configuration | Race Option | Race Advanced | BistBox

Session Name:

☒ Practice ☐ Qualifying ☐ Race

Laps: Tempo:

☒ F1 mode Auto Pause at:

☒ Penalties - n°max: ☒ Stop&Go

☐ save bestlap data

FUEL OPTION

☒ Activate control - time:

Fuel Warning (10-30%):

Here you can choose relative options to the sessions you want to do (indicating it's free practice, qualifying or race) and set laps or time limit for qualifying or race sessions. Completing the fields about session's time, the set laps won't be counted by the system. The **"Free Practice"** session doesn't have a limit in time or laps, **so if you want time limit for free practice select "Qualifying"**.

You can set a time in which the session can be automatically paused. For example, if you set 2 minutes, the timed session will be paused after that time lapse. Modifying the **"pasec"** field in **"confTab.cfg"**, you can exit from the automatic pause state after the set time without pressing any button (if you tick "reset" the session restarts from the beginning everytime).

Selecting **"F1 mode"**, when the leader finishes his laps every other driver can only finish the current lap ending the race.

ALERT: in case of F1 mode and fuel management activated, it will only count the last lap with fuel left (for example: you're 3rd and the leader has already completed the laps. If you're without any fuel left in the current lap, you'll end your race with the detected laps only, so this excludes the last lap in which you remained without any fuel left).

Selecting **"PENALTIES MANAGEMENT"** you can assign a **PENALTIES** number while you're in the pause screen (or pressing the numeric button of the lane that you want to penalize, directly in the time screen). You'll get disqualified when you reach the maximum limit of penalties.

Enabling the crashes/penalties management you can also choose to activate **"Stop&Go"** option: with this, you can decrease the given penalties by stopping at the box. After "x" seconds (they can be choose in the **"confTab.cfg"** file inside the install folder) the penalties will automatically decrease by 1. The car won't refuel while having a Stop&Go, but it only will AFTER serving the penalty.

With **"SAVE FASTEST LAP DATA"** the fastest lap (with its split times) will be written, and it'll be reuploaded in the next session always showing gaps to the fastest lap at every split.

Activating the **"FUEL"** option you can simulate the fuel/energy consuming for the cars on track. Setting the reference time, drivers will consume more fuel the most they'll get close to the reference time. If you don't set that time, the software will work on the various fastest laps.

In case of being out of fuel, that vehicle's lap times won't be counted until its refuel (a sound alert will be played when the lap time isn't counted for the missed refueling).

ALERT: in case of races with rotation system it's not possible to begin a heat while being in box. You must reposition the car right after the finish line sensor if the previous heat ended while you were refueling your car.

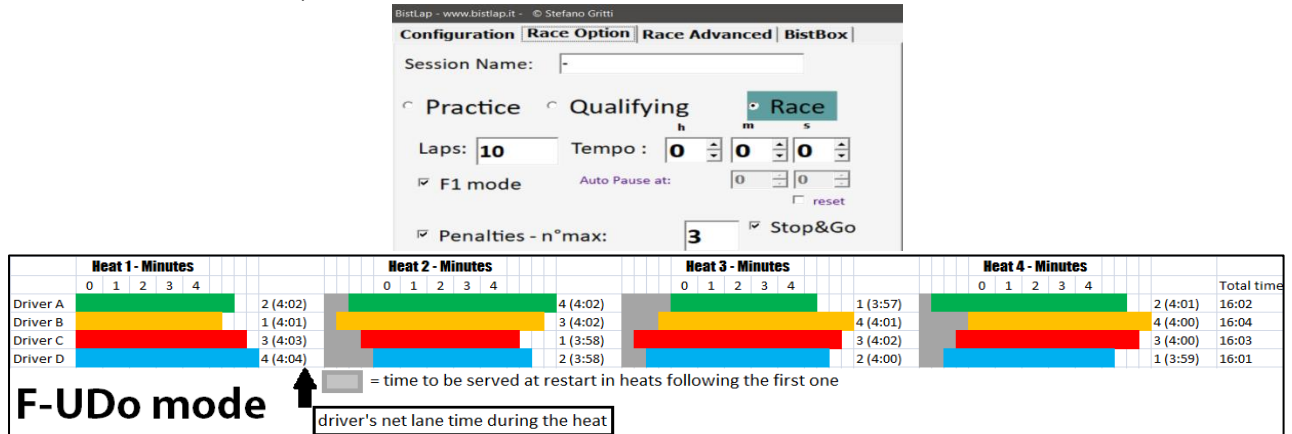
The valor of the fuel reserve alert influences the fuel bar's color and the moment in which you can hear the vocal alerts (only if the **"VOICE"** flag is activated).

You must stop right on the finish line sensor to refuel. On the time screen the corresponding row of the driver stopped in the pits will change color, the refueling icon will appear and, if "VOICE" is active, there will also be a voice alert, so the refuel will begin and the fuel bar level will grow until filling up.

ALERT: if you arrive on the sensor with no fuel, the lap won't be counted! You must stop before emptying your fuel bar. You can set the values of two variables (tfuel and xfuel) in the "confTab.cfg" file to refine the consumption's regulation. Insert the wanted settings and click on "Time screen" to start a quick session. For an advanced race management follow the instructions written in the "Advanced race" section.

Advanced functions about session options

(available in Bistbox 'Pro' version)



1) Timed race with final lap ending (F-Udo mode)

Enabling the "F-Udo mode" option (named before who gave me the idea for it) the timed race will end only when all drivers will complete the current lap when time's up (like a Formula 1 mode for timed races). At lap's end, the power supply to the single lane will be disconnected (not all together!), stopping every car right after the finish line.

In case of lane rotation, the taken time to reach the finish line, will be discounted before the restart in the next run beyond the set run time, keeping the gaps unchanged between everyone.

Cars must be repositioned right after the finish line, after the first heat. In round-robin races only the car that truly must start can be positioned before the finish line. From the 2.0.1.4 version, cars can all be repositioned before the finish line for convenience reasons (don't use the restart penalty in this case, and it's also possible to refuel). Finally, standings will be written based on completed laps number and drivers total time.

Example: in a 5 minutes race session your car approximately is in the middle of the track. The power supply won't be interrupted until the car doesn't reach finish line sensors, we can suppose 3 seconds after time's up. This car will start only 3 seconds after restart (so its lane will be powered) in the next heat. Every lane will have a different start based on when its car crossed the finish line in the previous heat.

In laps races (F1-mode) power management is the same as previously said in sessions endings: power will be turned off for every single lane for every car crossing the finish line.

2) Jump start

Selecting the "Jump start" option every lane will be powered from the moment the countdown starts. Starting before the red lights going off is considered as a jump start. If you activate vocal alerts for it, a message will be played with driver's name and the jump starter's lane number.

You can choose to automatically restart the session after a jump start, or else to continue giving a penalty to who did the jump start, if penalties are active.

This function is active only at every session's start and not after a pause stare during a session, while it'll be active only for the first heat* for lane rotation races, plus round-robin sessions too (more drivers than lanes) only powering the lane of who must start his first heat. *In laps races (even with lane rotation) jump start is always activated.

To restart the session you have to edit "ResetFP" field in "confTab.cfg" file.

Example: if you want to automatically set a stop&go penalty for the jumping start cars and give them a penalty as soon as the red lights go off you have to set "PenStart=True" in "confTab.cfg" (maintaining "ResetFP=False") and activating penalties management. Like this, if one or more drivers should do a jump start, their cars would stop and they would serve their seconds of penalty (which were set in "tStGo" field in "confTab.cfg" file) after the green lights.

3) Penalties management

In the “confTab.cfg” file you can choose to serve the penalties at the start or to serve them after a pause state, powering that lane only when penalties are served (set “PenStart=True” or “PenPau=True”). With the “stop&go” function, the lane powering is shut down when a driver serves a penalty in pits, until there aren’t anymore penalties, but only if “stopAlim=True” isn’t configured in “confTab.cfg” file.

For example: you can manually set penalties while racing or in the stoplight page and force drivers to serve them right after the green lights. Another example: you can set one penalty together with a jump start, so drivers can serve it right after the start.

You must edit “confTab” file to do this, putting “PenStart=True” (normally it’s set on “PenStart=False”). Like this, every penalty will be served at the start, and Bistlap will power the lane only after the penalties will be “0”.

TIP: during a “F-UDo mode” heat, in case of a penalty at the start, the driver’s previous heat time will be added to the last penalty so the car in that lane won’t restart before the driver served that penalty. This choice was made because of convenience reasons, and to avoid the relay’s unnecessary activation after serving the reported time, and its second activation to serve the penalty time.

For example: if the ‘X’ driver has to serve 2 seconds of penalty before restart (the time from the previous heat) and has 3 1-second penalties too, he’ll serve the first 2 1-second penalties while the last one will have a lasting of $1(\text{penalty time})+2(\text{previous heat's time})=3$ seconds.

4) Free practice with automatic pause and restart

In timed **Qualifying** sessions (you have to use **Qualifying** because **Free Practice** sessions don’t have a set time) with automatic pause and **reset**, BistBox Pro allows you to stop all the cars at the finish line at the end of the set time. When the automatic pause time is up, you have some seconds to arrive at the finish line (where every single lane’s power will be shut down).

ADVANCED RACE (QUALIFYING/SINGLE SESSIONS): in this tab you can manage the qualifying session in “advanced” mode.

Pos.	Pilota	Bestlap
1	Driver A	null
2	Driver B	null
3	Driver C	null
4	Driver D	null
5	Driver E	null
6	Driver F	null
7	Driver G	null
8	Driver H	null
9	Driver I	null
10	Driver J	null
11	Driver K	null
12	Driver L	null
13	Driver M	null
14	Driver N	null
15	Driver O	null
16	Driver P	null
17	Driver Q	null
18	Driver R	null
19	Driver S	null
20	Driver T	null
21	Driver U	null

You can enter drivers and start the qualifying session for every single driver. This is a single qualifying mode, meaning that a driver will be on track only for the set time or the set laps alone using a favourite lane. Once the drivers have been entered writing names in the yellow cell, you only have to tick the “Start qualifying” field then click on the driver name that has to start (the name will be seen in every ‘name’ field on the right of selected lanes) and start the time screen. During the qualifying session you’ll always see your reference time (and split times) from best session time, and at the end you’ll see the gap from leader and the actual position of the latest driver to be on track. It is also possible to import a drivers list from an external text file (.txt) by clicking on “Import list” (an example file is shown in the installation folder).

The grid in “**Qualifying**” section will be automatically ordered at the end, always showing you the updated standings. By the way, you can order data easily by clicking on the column header and it’s possible to reassign positions based on a custom order clicking on “**Reorder/export**”.

In case of an error: you always can manually edit data. To repeat a driver’s qualifying you must deselect “**Start qualifying**”, erase that driver’s lap time writing 0, and then reselect “**Start qualifying**”. You can eventually add more drivers or edit data in the table until you click on “**Validate qualifying**”: at this point the board will change to adapt itself to **RACE** data. To erase a driver you must select the entire row clicking the first grey field of the row (the one with the indicator) and press ‘Canc’ from keyboard.

By selecting the “Sum of lap times” option, you can start more qualifying sessions for every driver, and for every session Bistlap will record the best lap and the total time. The absolute best lap, the best laps sum and the total time sum of the sessions will be recorded in 3 specific columns (*ex. in 3 laps sessions you’ll have the sum of the total time of these laps*). You can select the automatic ordering (applied to the end of every session) between best absolute lap time (**Bestlap**), sum of best lap times for every session (**S.Bestlap**) and total time of the sessions (**T.Tot**). REMEMBER: the real time positions, as shown in time screen, they always refer to the absolute best lap independently from your choice about the starting grid. This function is very useful for **team qualifying** and **also for Rally races management in various stages**.

TIP: It’s important to select the time or laps of the session before starting the qualifying.

TIP_{No.2}: For the 2-lane BistBox, if you select only the first one, the second sensor will be managed as a split (the lane 2 must not have the tick and its driver has to be named “-“).

ADVANCED RACE (RACE): After qualifying sessions are finished and validated, you’ll see the drivers data on this screen below (and eventually their qualifying lap times too) ordered from their standings.

The visible columns are: **Position, Driver, Qualifying Time, No.Heat, Tot_G.S** (total laps and sector), **gR1** (laps of Heat 1), **gR2, gR3... gR6, Bestlap, L** (lane in which the driver did his best lap), ***T_Tot** (total time) and **avgBL** (average of the best laps per lane).

Here you can create race heats: you must select drivers rows to build a heat simply by clicking on a driver’s name, and the row will be coloured based on the assigned lane. You also can decide the initial lane for every driver just clicking their row repeatedly (assigning the lane color). Once you are sure you can click the “**Create heat**” button. The “**Random**” button generates a casual heat (of as many drivers as there are selected lanes).

Configuration

Race Option

Race Advanced

BistBox

Load data/Refres

Show Q.Time

make Heat

Random

Restart

End(delete)

allow mod.

HTML

Reset

ord./Exp

setup time or laps for session

Pos.	Pilota	nB	Tot_G.S	gR1	gR2	BestLap	C
1	Driver A	0	0	0	0	0	0
2	Driver B	0	0	0	0	0	0
3	Driver C	0	0	0	0	0	0
4	Driver D	0	0	0	0	0	0
5	Driver E	0	0	0	0	0	0
6	Driver F	0	0	0	0	0	0
7	Driver G	0	0	0	0	0	0
8	Driver H	0	0	0	0	0	0
9	Driver I	0	0	0	0	0	0
10	Driver J	0	0	0	0	0	0
11	Driver K	0	0	0	0	0	0
12	Driver L	0	0	0	0	0	0
13	Driver M	0	0	0	0	0	0
14	Driver N	0	0	0	0	0	0
15	Driver O	0	0	0	0	0	0
16	Driver P	0	0	0	0	0	0
17	Driver Q	0	0	0	0	0	0
18	Driver R	0	0	0	0	0	0
19	Driver S	0	0	0	0	0	0
20	Driver T	0	0	0	0	0	0

In the **nB** field you’ll see a progressive number for the heat, drivers names can be seen on the right side of the menu and “**START ROTATION**” will have a tick. Like this, you simply can click on “**Table**” to start heat rotations (see the ROTATIONS paragraph in the next pages).

In case of errors, you have to deselect “**START ROTATION**” and select “**Enable mod.**” in the “Race” section to erase the heat’s number and go back to selection. The “**Enable mod.**” option lets you edit any field inside the table. It also lets you add drivers ‘exceptionally’ just by clicking the little red button appearing under “**Enable mod.**” then directly edit the name in the table. Before clicking on “**TABLE**”, you must verify session options (especially that laps or time set of that battery

are correct) and control the initial fuel data if it's set in different ways for every driver. It's the same for eventual customised images to change for every rotation start.

Once you clicked on table, you'll check on **time screen**: THE DRIVERS DISPOSITION IS SHOWN UNDER THE STOPLIGHT (driver xxx Lane1, driver yyy Lane 2 etc...), at the end of every battery every data like done laps, total time and best lap will be shown in the race table. Here you can see the updated standings ordered by heat number.

Example: if a battery already ended its rotations and **we're at the first heat of second battery, the standings will follow the first heats so it compares the laps having the same done heats.** The ordering column will be highlighted on green and it'll be validated, also in round-robin heats.

In every case, you can order the data (and positions) by choice, simply clicking on a column header.

Example: in a laps race (not a timed race) you can manually order data and positions clicking on the 'total time' column.

TIP: to select more drivers than the available lanes (having a rotation in which some driver will be out of some heats) you must tick the "lane" flag on right half of menu, based on how many drivers have to race.

The 7th 'lane' is only for 7 drivers races in a 6-lanes track.



Example: you have 4 available lanes and a 6-drivers battery. You have to tick 6 lanes on the right of the menu and proceed to create the battery. When every heat starts, lane 5 and 6 will tell which drivers have to stay still during this heat.

With the same option we can have less drivers based on the real and selected lanes.

Example: you have 4 available lanes and a 3-drivers battery. You have to tick 4 lanes on the right of the menu and select the 3 drivers in the 'Race table' then proceed to the rotation. In this case, you only have to control to which lane your name is assigned, and you'll ever notice an empty lane.

TIP: The "Load/Update Data" button updates the grid and uploads data from previously saved base. It's useful in case you selected more lanes or less that you needed (wrongly or not) so more rounds or less will be shown in standings. In fact, if you selected 4 lanes, you won't see the round 5 and the round 6.

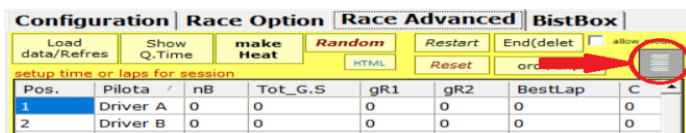
Also in this tab you can save and export statistics data, prints or future consulting.

By clicking on "Restart" you can restart rotations, starting from the laps number of this race, so you can reform the race batteries (it's necessary to reposition the cars at the start, before the finish line).

By clicking on "Reset" you can erase all data, except drivers names and their qualifying lap times. It's also possible to choose the average time for the best laps for every lane (in "avgBL" column) instead of their best lap.

By clicking on "End" you will erase all data and a summary file will be saved in "C:\BistLapA\Advanced" folder. If you click on the columns, you'll reorder the grid based on the selected column, then you have to click on "Reord/Esp".

By clicking under "Enable mod." you can see the **general standings** in every moment, in a specific screen with every heat's laps, pit-stops and eventual penalties (laps won't be added together, like in the advanced race form).



You can color the fields about every heat's laps in function of the lanes set colour, you just have to click the coloured button next to the 'export in .xlsx' button: this also highlights the best qualifying lap and the best race lap. From this screen, you can see the standings in an image format and upload it online in live events by clicking on "Image" (BistBox) button on the left: a QRcode will appear once it's available online, like in session results page. It's also possible to export the standings (with adding formats and data) in .xlsx and .csv, where best driver laps for every lane will be also shown.

18/12/2017 -											
P	Pilota	Tempo Q.	nB	Tot_G.S	r1	r2	r3	r4	BestLap	C	*T.Tot
1	Frank Siscivola	10.786	3	114.049	28	29	28	28	10.066	2	1171.197
2	Fenomeno La Curva	10.635	3	109.128	27	27	27	28	10.101	2	1165.945
3	Jack Burton	10.513	3	109.090	27	28	28	28	10.288	2	1168.499
4	Sempronio	10.461	3	109.029	27	28	27	27	10.424	2	1173.705
5	Ayeye Brazov	10.864	2	106.100	26	27	26	27	10.381	1	1171.987
6	Spacco Tutto	11.074	2	105.016	25	26	27	27	10.754	3	1169.895
7	Dritto Sempre	11.133	2	104.098	26	26	27	26	10.866	4	1162.152
8	Capitan America	11.308	2	104.072	27	26	26	26	10.775	3	1165.184
9	Bist	11.333	1	104.053	26	26	27	26	10.727	3	1166.673
10	Lino Pasquetta	11.512	1	101.041	25	26	25	25	10.936	2	1167.847
11	Pinco Palla	11.395	1	99.107	25	25	26	25	10.876	4	1171.394
12	Guido Veloce	11.475	1	93.120	22	23	24	24	11.375	2	1160.849
13	Tizio Caio	12.072	1	92.074	23	24	22	23	12.573	1	1172.65

TIP: in a **TIMED** race, the race grid order is automatic so the standings order is based on “POS” field of the advanced race grid.

If you're doing a **LAPS rotation race**, when you open the standings you can notice the race grid order will be ignored and it'll be based on total time. In a **F1-mode LAPS race**, the order will be set based on the done laps number and secondly on the total time.

IMPORTANT: data are automatically saved in both advanced management forms at the end of every session so, in case of a blackout or other problems, when BistLap restarts you'll have the last saved data. All data are physically in a file in the **\Advanced\Tmp** folder.

BISTBOX: here you can configurate BistBox from the used sensors type, if with infrared light or reflective ones. Using the enlighten configuration, BistBox will automatically do a check at every program start to disable not collected or not working sensors. By doing a **sensors checking**, the active ones will be highlighted by green and the unactive (or shadowed) ones by red.

Configuration
Race Option
Race Advanced
BistBox

BistBox configuration based on used sensors. Use this function only if You know what You're doing!

Reflective sensors

lit sensors

Check sensors (only with lit sensors)

AGGIORNAMENTI / UPDATE

TIP: During the program start or the enlighten sensors checking, any unilluminated sensor (not connected or shadowed) will be disabled.

TIP₂: The test signals the enlighten sensors but it'll give a false positive if a sensor is shorted, not detecting any lap at all!

In addition to previously described 'forms', you have the lane rows and driver rows (already seen in the advanced management paragraph) in the menu, where you can select the lanes number to manage an eventual rotation and write the driver names down (for quick sessions) and also their images (the lane number will be shown if you don't choose an image). The colour is customizable too by clicking on the left of the name. You also can save a name, an image and an initial fuel level in a "driver" file to reupload it later.

The available rotations are of 2 type (seq= 1→2, 2→3 ... mix = 1→3, 2→1, 3→5...) and they become active by a tick on "START ROTATION" after selecting the rotating lanes (the 7th slot is only for 6 lanes races).

You can have rotations with **TIMED** or **LAPS** heats, also with **F1-mode**. Obviously, cars will restart before the finish line in every heat, thanks to the laps mode, and standings will be based on the total time. The real cumulative gap is correctly shown in the **standings screen**, while it only refers to the current session in the **time screen**. You can't have round-robin heats using laps.

After enabling the rotation, every heat data will be reported in the next heat (the r.img. flag can eventually rotate the drivers images). In the event the drivers are more than 7 you must use the Advanced Race section with a different management. In these races, if they're **TIMED**, you can select the **C.Pos** option to see the provisional general position directly on the time screen in the field below the laps number, and it's updated every minute passing. This function is active and correct during round-robin heats too, and obviously cares about drivers that raced until that moment.



TIP: You must choose the rotation type *before* clicking on "START ROTATION". At every session start, time screen will directly open in PAUSE state with the drivers already placed in their new lanes. Just read their names and the assigned lane for the cars placing on track.

IMPORTANT: in case of a blackout during a rotation heat, when the system is restored you can restart from the last completed heat. First, you must verify the session options for **Fuel management** and **Stop&Go**, then click on "Time screen" and a window will appear, asking to restore the previous rotation or to have a new one with current data. In case of restoring, the race time (or the laps) will be automatically set and the drivers name will be shown on the time screen with previously saved data. You can correct the laps in every case, as explained in the "STOPLIGHT (PAUSE)" chapter.

ROTATION EXAMPLE:

There are 5 drivers and a 4 lane track and you decide to have timed sessions. Begin by writing the drivers names in the specific fields, select the first 5 lanes then start the rotation. Obviously, one driver is excluded for every turn, so you must race 5 heats to complete the rotation.

The standings page will always be cumulative and you can manually insert the sectors (or modify the total laps) for every single driver in order to export a complete Excel file about the last heat (ordered by "laps, sectors").

To do that, you must double-click on the driver name to open the variation mask. At the end of your edit, double-click on the session title (up-left) to update the page with each variation that you did.

TIP: During a rotation heat, in the time screen, if it's necessary that you reset the heat, open the "Configuration" menu and select "RESET". By that, the current heat will restart.

In case you want to end a heat before the set time and still validate it, you must open the "Configuration" menu then select "Session end", like this you'll open the stangings screen.

BEWARE: if you go back to "Main menu" from the **stoplight** screen, rotation will be compromised!

By clicking on "Save configuration", every menu setting is saved for every BistLap start.





By clicking on ON/OFF, you give power to the track or shut it down without being in the time screen, directly affecting the relée.

By clicking on "TIME SCREEN" or pressing the quick key "F10", you may access to detected times of the set session.

TIME SCREEN

On this screen you can see drivers, lap times and positions. Its layout is optimised for the selected lanes. Starting from the left, it's shown: **lane number**, **actual position**, **image/logo****, **driver name**, how many **pit stops** done (if fuel management is activated), **penalties** number (if crashes management is activated), **done laps / gap from above** (by the selected session and options in the configuration menu), the **last detected lap / driver's best lap** (this one will flash for each improvement or it will be highlighted in case of absolute best lap of the current session), the just recorded **split** (or the **difference from the previous lap** in case there aren't splits) / the **gap from the absolute best lap**, and the registered **medium speed** / the **sector's number** you're passing by. This last field (sector) is only useful when a split times detection is installed, otherwise it always will have "1" as its valor. Also, if an ADVANCED RACE is on and the "C.Pos" option is selected, the sector field **will show the provisional general position** (instead of the sector's number), updated every minute.

This position is compared with all the drivers who raced until that moment, and it's also correct for ROUND-ROBIN heats (with more drivers than available lanes) because considers the minute the driver actually races. In round-robin you could see two identical positions, because drivers were effectively in different minutes of the race (*example: in 5 minutes heats, if a driver starts racing in the second heat it'll be the first minute for him while it'll be the sixth for the others*).

Configuration		RACE laps: 10											
ID	Pos	00:00:00	Driver	 	Laps / Gap	Last / Best	Split time / Gap from best	Kph/Sec.					
LANE	CURRENT POSITION	PERSONALISED IMAGE	DRIVER NAME	PIT-STOPS		PENALTIES	LAST LAP TIME	TIME RELATED TO THE SECTOR OR DIFFERENCE FROM THE PREVIOUS LAP (IF THERE ARE NO INTER-TIMES) OR AVERAGE TIME PER LAP (IF ACTIVATED)	AVERAGE LAP SPEED OR MAXIMUM IF DETECTED				
				DONE LAPS AND EXPECTED LAPS (WHEN IN QUALIFYING OR RACE SESSION)									
4	1		Auto4	2	1	9	13,045	6,217	11,35				
						0.000	11,985	0.000	3				
5	2		Auto5	3	4	8	12,677	6,784	10,57				
						+1 Giro	12,007	0.000	1				
				FUEL LEVEL		GAP		DRIVER BEST LAP IN CURRENT SESSION		CURRENT OR PROVIS. SECTOR			
										GAP FROM ABSOLUTE BEST LAP (SECTOR BY SECTOR)			

****TIP:** in the folder **"/Images/Drivers"** you can insert images renamed as the driver name. Everytime the driver name appears in the time screen, the image will automatically be associated.

Example: inserting the "Jonah.jpg" file if a driver is named Jonah, you'll see the "Jonah.jpg" in the time screen.

There's the configuration menu in the upper bar, and there you can choose the order type (if by lane or by position, in Free Practice/Qualifying/Race). In Free Practice and Qualifying gap and position are only calculated on the fastest lap. You can choose to show the gap from the leader or the gap from the driver ahead of you following your preferences.

You can activate a second time screen by clicking on **"LAST LAPS MONITOR"** (or **"ALT+M"**), in which screen are shown the last 20 laps of every driver with lap times, medium or maximum speed (if the track is set for speed registration), and the difference from the previous lap (or medium lap time). The lane's best lap can be seen on top of the columns.



You can choose to enable or unable any of the single sound alerts (of the session). These sound effects are in the installation folder (**SFX**) and they can be replaced maintaining the same file name. You can also decide to show total laps or total time on the time screen, and also to show or not the remaining time enlarged (it'll take the place of **"Pos."** and **"Driver"**). You also can reset the current session, restarting with the current parameters.

In **"APP Management"** you can enable the lap times vocal reproduction *by your own smartphone*, with its **APP** installed (*see last paragraph for instructions*).

Clicking on session type, on the center of the upper bar, you can reset the session like you can do from the menu.

On the upper bar's right you can quickly click **"PAUSE"** if you have a touchscreen monitor.

Some important functions are enabled thanks to **keyboard shortcuts**:

- **"ALT+S"**: saves the image from the entire screen in the "screen" folder;
- **"ALT+M"** and **"ALT+N"**: Opens and closes the 20 last laps monitor;
- **"SPACEBAR"**: pauses the session, turns the power off on track and shows the stoplight screen;
- **"CTRL+F12"**: ends the session without erasing it, shows the standings screen with session's registered data;
- **"NUMERIC KEYS"**: with **penalties management** enabled, clicking the corresponding key to the lane number to be penalized will give that lane a penalty to serve;
- **"DOUBLE CLICK ON BEST LAP"**: erases a driver's best lap during the session, restoring the previous one (personal and overall);
- **"DOUBLE CLICK ON DRIVER'S LAPS NUMBER"**: quickly increases by 1 the selected laps number without pausing the session (useful in case of faked laps because of lane changes, crashes etc...);
- **"DOUBLE CLICK ON DRIVER'S POSITION"**: if you're having an Advanced Race with timed lane rotation, a screen will open in which there's the **general provisional standings** of that minute (close it by clicking again on the driver's position).

Class. Prov. minuto: 1

P	Nome	Giri
1	Tutto Premi	7
2	Adesso Vai	7
3	Quasi Vinco	7
4	Ico De P	6
5	Aveve Braz	5
6	Ricchi Premi	5
7	Tony Ynot	5
8	Primo Cento	5
9	Sti Caxx	4
10	Balla Bolla	4

Every minute the recalculation is done, so it's the **"provisional position"** field below the laps number, and it firstly counts the done laps then the time for those laps. With the same laps, it will show the gap from the previous driver, otherwise the total time on the latest lap.

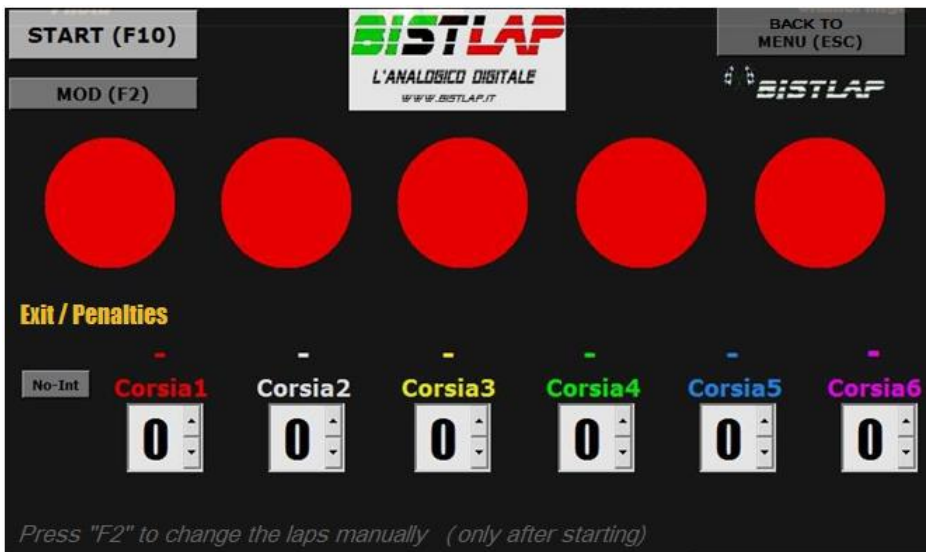
TIP: These provisional general standings always counts the minute of heat's leader race. In case of round-robin, it could not show all drivers data because some could race in a different minute from the leader.

This screen will close up automatically when the time screen will be closed, otherwise you can double-click again on the **"position"** field in the time screen. You also can resize it by your likings (in height).

- **"FUNCTION KEYS (F1,F2 etc)"**: they reset the selected lane times (*example: F1 = lane 1*) exclusively during **FREE PRACTICE** sessions.

STOPLIGHT (PAUSE)

This is the session start screen (or pause screen), the power's off and red stoplights can be seen.



By clicking on “**START**” or “**F10**” the session start and track power countdown will begin.

By clicking on “**TORNA AL MENU**” or “**ESC**” the session will be cancelled and you’ll get back to the main menu.

By clicking on “**MOD**” or “**F2**” it shows a section in which you can manually edit the various laps done by drivers in case of wrong registrations. The driver’s row must be visible on the time screen to edit the laps.

By clicking on “**No-Int**” every following lap will be count without considering the interdiction time or the fuel level.

In case of needing, by double-clicking the ‘BistLap’ image (on top right, below ‘BACK TO MENU’) you can skip the countdown procedure by making the stoplight disappear and giving power to the track. BEWARE: using this function to resume from pause during a race (not at the start) could fake the times recorded subsequently.

If you enabled the **penalties/crash management** in main menu, you can assign them to the drivers: put it in the right field (highlighted in yellow) or else digit the lane number on the keyboard in which you want to increase by +1 the crashes/penalties valor. This procedure is confirmed by a sound alert.

By clicking on “**ENTER**”, the stoplight will become transparent permitting you to see the time screen maintaining the pause state. Turn it to visible again by clicking a second time on “**ENTER**” or else by enabling the countdown with the quick key “**F10**”.

BistBox can register only a lap for every sensor in pause state. This lap will be visible on time screen after pause state ended.

TIP: lap time is directly detected by BistBox and not by PC software, so after the pause time it’s “*calculated*” by difference from the pause time itself. This time can’t be precise, so it’s never considered as the eventual fastest lap.

This is the summary screen of the ended session, showing position, gaps and the various detections. Session's fastest lap will be highlighted by **yellow**, while the absolute fastest lap (in case of rotation races) will be highlighted by **green** (personal best lap, between various sessions, is shown under the best lap of the current session). The **gap** is always from the session leader.

TIP: gap is always relative to time detection on the same lap (or same lap's split time) so it couldn't show the real gap in case of timed session because they don't end at the finish line.

In case of a manual laps (or sectors) edit in the final rotation heat, the gap could show wrong values. The reached *maximum speed* is about the session or the sessions sum (in case of rotation heats).

Medium speed is about the best lap in case of free practice or qualifying sessions, while it's about the session total time in case of a race.

In case of the last timed rotation heat you can click on the driver name to insert the done track sectors (999 max.). After that, click on the session title (up-left) to confirm and update the page with the new data (*in case of an Advanced Race you can put those valors in successively and directly on the standings screen*).

With this screen, every lap telemetry is automatically saved in the **"TELE"** folder (with the lane number inside, together with driver name, lap time, progressive time passed, eventual pit-stops and fuel level) and a summary file of the final standings. These files can be opened and edited by using Excel.

By clicking on **"Screenshot/Generate QRcode"** the screen image is saved in the "SCREEN" folder and a QRcode is generated for the online viewing by its scanning.

TIP: if you want to generate the QRcode you must have an Internet connection and you mustn't rename the file.

[illegible]

TIP: in case of configuration with **extended desktop (multiple PC screens)** the *time screen*, *stoplight (PAUSE) screen*, *last laps monitor* and *final standings screen* memorise their position until the program restart. So we can obtain a monitor with the time screen and another one with the last 20 laps, or else a monitor with time screen and another one with the main menu. Stoplight and final standings will appear in their basic position where the time screen is shown.

BISTAPP (available on Google Play Store)

**** (THE FOLLOWING SCREENSHOTS ARE IN ITALIAN, THE SHOWED PASSAGES WILL TRANSLATE ON AN ENGLISH SET COMPUTER) ****

If ticked on **time screen**, you can hear a specific driver's lap data from your Android device.

To configure this function you need:

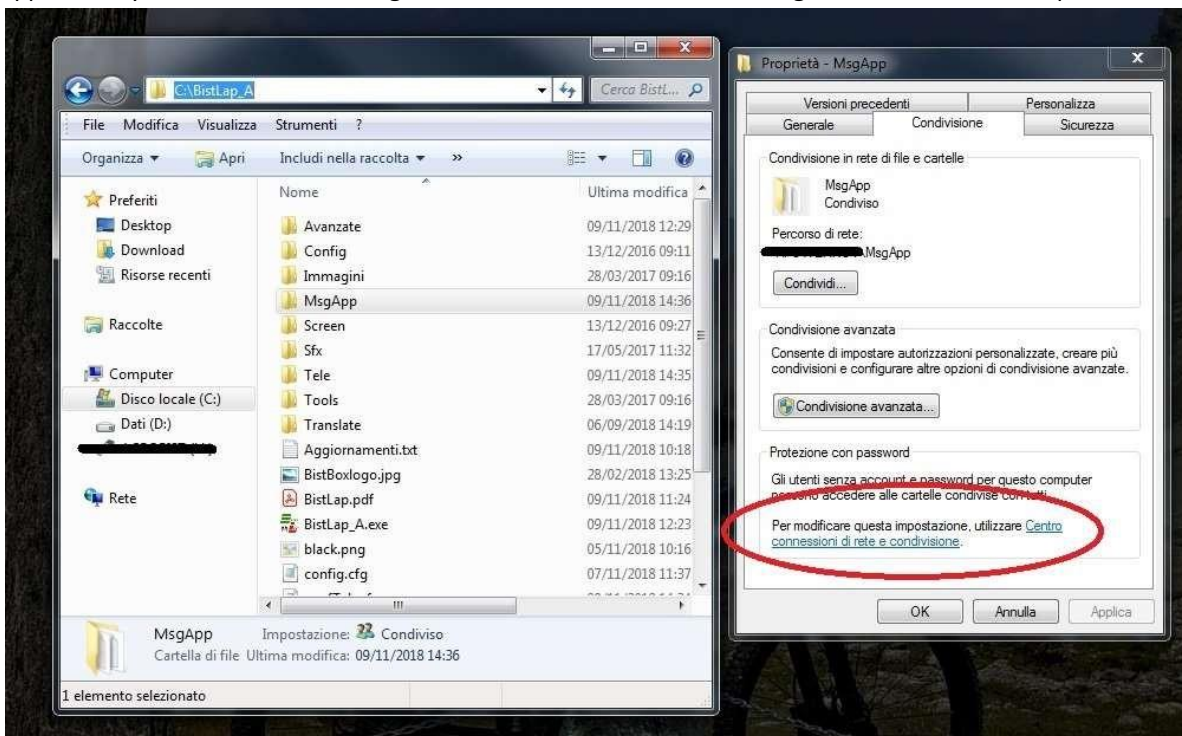
- 1) Be part of a Wi-Fi network that Android devices are also connected to;
- 2) Share the **"MsgApp"** folder in writing and reading (in **c:\BistLap_A**) so that it can be accessible via web.

To make sharing procedure easy you can click on **"BistApp"** in the **"Configuration"** card. The procedure will attempt to automatically configure your PC for messages management and it will give a message in which there's the IP address to insert in the App on device.

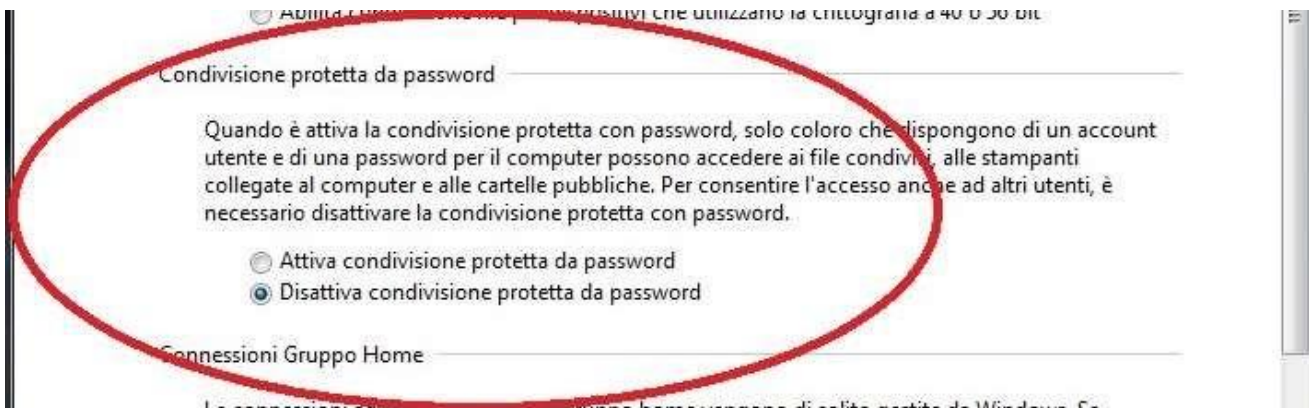
You have to perform BistLap in Administrator mode to start the procedure.

In Windows you have to manually disable the password protected sharing and eventually disable the firewall/antivirus too.

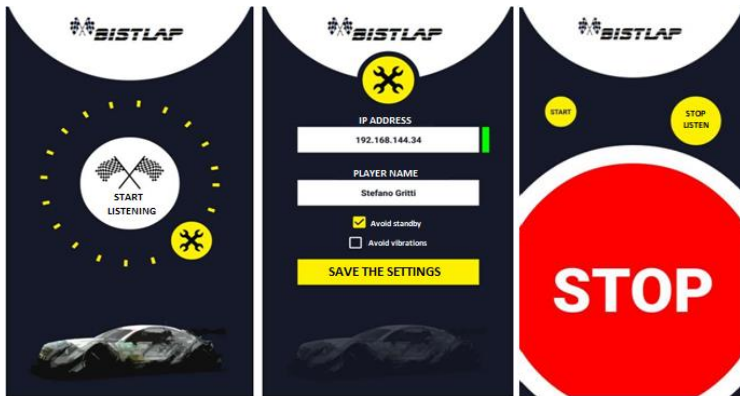
To do that, you must open the **c:\BistLap_A** folder, right-click on **"MsgApp"** folder and select **"Properties"**. A window will appear and you must select **"Sharing"** then click on **"Network and sharing center"** link like in the picture below.



When the link is opened, search for **"Password protected sharing"** and disable it;



- 3) Install the app on your device;
- 4) In the options, you have to write the computer's IP address in which BistLap is installed. There's a red rectangle next to it: it will become green after saving the configuration if path and folder are reachable;
- 5) Write the followed driver name.



To listen to session data you must write the same name on BistLap and BistApp. Once the time screen is enabled, click on **"Start listening"** in the app.

Now, after every lap you can listen your lap times and other data as remaining time, gap and lap number. Two sound alerts will indicate the eventual lack of fuel and the fastest lap.

You also can manage the track power, if **"Accept Stop key"** is ticked on the time screen configuration menu. Clicking on **"STOP"** will cut off the power, while clicking on the small **"START"** button will turn it on again.

Once the session is finished, the App will automatically end the listening after the standings screen.

TIP: the vocal alerts and the **"STOP"** and **"START"** buttons will only be enabled if the time screen is active and the driver name is written exactly as it is in the configuration.

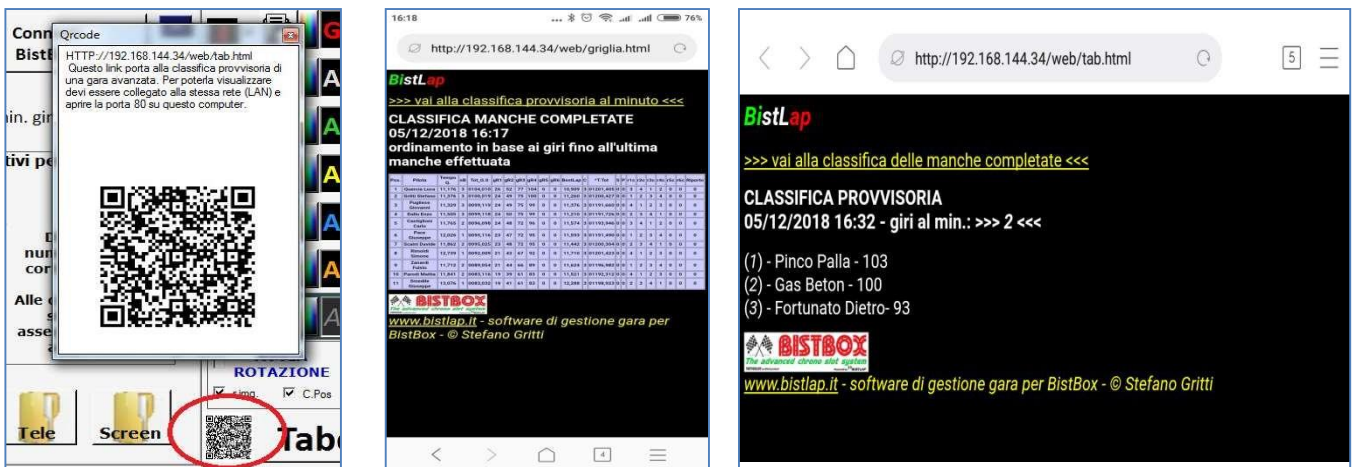
WEB SERVER



Setting **"srvweb=True"** in the **"config.cfg"** file and opening the **"80"** door on eventual firewall, when you open BistLap (in Administrator mode) you'll be able to access to a local web server that shows timed advanced race's standings.

Double-clicking on the **"QRcode"** image opens a window with IP address and QRcode, conveniently scannable with portable device, that directly takes you to the standings web page.

You must be connected to the same PC network in which BistLap is working to see the page through any browser.



WHAT TO DO IF...:

- 1) **I want to power the track before starting the race:** just click on **ON/OFF** button of main menu before entering in the time screen. If you already are there you still can start the session just to reset it afterwards (by clicking on reset in the "Configuration" menu on time screen) to restart the current session.
- 2) **the computer shut itself down/freeze while I was in rotation:** restart BistLap, make sure to write the same settings in the **"Session options"** section and select **"Start rotation"**. The rotation restore request will appear with data saved in last heat.
- 3) **I created a 4 drivers heat but I forgot the selection on 5 lanes because the previous was a 5 drivers heat (round-robin):** if the rotation hasn't start yet you can select **"Enable mod"** and deselect the 5th lane. Otherwise, if you already finished the first heat and you notice that a driver is in the 5th lane before the second you must reposition the cars in the ending position of the first heat. Restart BistLap, select the 4 lanes and start the rotation. The paragraph 2) restore procedure will automatically upload first heat's data and you can keep going with that.
- 4) **it was given one lap less to a driver:** double-click on that driver laps number to increase the completed laps number by 1, otherwise change the laps from the pause screen (using **+** or **-**). You can do this during the following heats too.
- 5) **lap isn't assigned but the laps field is flashing:** verify the interdiction time and your fuel level.
- 6) **another lane's car has passed under the detection sensor:** if the interdiction time is correctly set you just have to increase the laps number of that car. The lane that detected the lap shouldn't count it or, if it's over the interdiction time, it won't count the next lap generating a lower lap time. Verify the **"fastest lap"** validity.
- 7) **I want to erase a fastest lap:** Double-click on the fastest lap that you want to erase. In case of an *Advanced Race* with the heat already ended, you can manually edit it in the advanced race grid.
- 8) **I stopped right below finish line sensors at the end of a rotation heat (or after clicking "PAUSE"):** after the power turns off, the laps are detected for 2 more seconds covering these cases. If in doubt, verify the laps in detail in the **"TELE"** folder. The car has to be repositioned *AFTER* the finish line sensor for the next heat. If fuel management is activated and the heat ended while you were refueling you still must reposition the car after the sensor.
- 9) **I want to see every lap's details:** at the end of every session a .csv file is generated in the **"TELE"** folder. Depending by the session type, the file will have various details (*for example: after a timed Advanced Race a named file will be generated with rotation number, actual date and time*) like the lane number, driver name, lap number, lap time, progressive time and (if enabled) the fuel level and if you did a pit-stop.
- 10) **I can't see every round in ADVANCED RACE grid and in the STANDINGS:** the grid is generated based on selected lanes number at the end of Qualifying session, so if you only selected 2 lanes you'll only see 2 heats (but it records their data anyway). To see them, you must click on **"Upload/Update Data"** (only if you selected lanes, *4 for example*).
- 11) **there aren't race stewards, so after every crash I click on "PAUSE". I would like that the crashed driver would stay still for 4 seconds as a penalty when the race continues:** first of all, you must set the **"penPau=True"** field in **"confTab.cfg"** file and set the **"tstPa=4"** field too, while in the session options section you must enable penalties management. Now, clicking on **"PAUSE"** for every crash, you just have to assign a penalty to the driver who crashed, so at the green lights that penalised driver will stay still for 4 seconds.
- 12) **I hear the BistBox "beeping" but nothing appears on the time screen:** verify in main menu the ticked lanes and the driver name.
- 13) **advanced final standings aren't correctly sorted:** the sorting goes based on the inserted settings in the **'sessionoptions'** and verify that they match to the carried out race (*time, laps, F-Uno mode*) (*see page 10*).
- 14) **I want to add a driver who arrived after Qualifying session:** select **"enable mod"**, then click on the red button under the flag.
******* ADVANCED RACE PROCEDURE ***** (details on pages 5,6,7,8)**
 - 1) In the Advanced Race section (Qualifying) write every driver name in the yellow fields.
 - 2) Set the wanted session options (laps or time) and select **"START QUALIFYING"**, then select the driver that has to start and make sure that his name appears in the right fields on the selected lanes. You also can add more drivers while qualifying goes on deselecting **"START QUALIFYING"**.
 - 3) After Qualifying, click on **"VALIDATE"**. Data will be reported on the Advanced Race section (Race).
 - 4) Set the session options (time or laps refer to every heat).
 - 5) Click on driver name until its colour will be of the wanted lane.
 - 6) Once every driver has a lane, click on **"CREATE HEAT"**. To race in a 4 lane track having 5 or 6 drivers, you must select lane 5 and 6 on the right of the Advanced Race section. Driver names can be seen on the right, next to the lanes.
 - 7) Click on the green button that indicates the selected rotation type to access to the time screen with stoplights.
 - 8) After every heat, race grid will be ordered by the heats number and the laps done, comparing the various heats.
 - 9) At the end of the last timed rotation heat, you must write the track sectors: click on the driver name and manually insert the sectors, then click on **"CONFIRM"**. After you inserted them for every driver, click on the up-left on the standings page title to see the heat's final standings. In every case, data will be reported on the advanced race grid and you can manually edit them directly on the grid by selecting **"Enable mod."**.
 - 10) Repeat *paragraphs 5-6-7-8* until the heats ending. Standings in advanced race will always be in function of the last raced heat. To see the final standings, click on the small button under the **"Enable mod."** option.

“confTab.cfg” file

****(THE FOLLOWING SCREENSHOTS ARE IN ITALIAN, THE SHOWED PASSAGES WILL TRANSLATE ON AN ENGLISH SET COMPUTER)****

You can open and edit the “confTab.cfg” file using the classic Notepad.

```
-----VALORI EDITABILI / VEDI MANUALE PER ISTRUZIONI-----
---Funzione LED (pin13) 1000=passaggio/ 1001=disattivo / 1002=box / <1000=con speedtrap, Autovelo---
led1:1001
-----moltiplicatore velocità rilevata/media-----
convvel:1
-----distanza sensori speedtrap in metri (25 cm = 0,25)-----
mtSpTrap:0,25
-----consumo costante:riducendo tfuel si consuma maggiormente (min 40, max 400, standard = 150)----
tfuel:150
-----capienza serbatoio. valori da 1 a 5 (valore standard = 2)-----
xfuel:2
-----se fuelgiro >0 il consumo carburante è fisso in % ad ogni giro (min 0 max 25)-----
fuelgiro:0
---secondi per ripresa da pausa automatica (0 = no ripresa automatica, min 10 max 120)----
pasec:0
-----secondi necessari per scontare 1 penalita'(partenza, falsa partenza e stop&go)-----
tStGo:5
-----secondi necessari per scontare 1 penalita' dopo lo stato di PAUSA-----
tStPa:5
---solo per BISTBOX PRO, se true in stop&GO mantiene la corsia alimentata-----
stopAlim:False
---solo per BISTBOX PRO, In PARTENZA se True alimenta la corsia solo quando le penalita sono a 0---
PenStart:True
---solo per BISTBOX PRO, dopo una PAUSA se True alimenta la corsia solo quando le penalita sono a 0--
PenPau:True
---solo per BISTBOX PRO, se True la gara si resetta dopo una falsa partenza---
ResetFP:False
---Mostrare al posto dello scostamento il tempo medio a giro---
Tmedio:False
---Mostrare accanto al giri effettuati la previsione dei giri a fine sessione---
PreGir:False
---Mostra il semaforo trasparente---
SemaTrasp:False
---In modo Pratica e se voce e'attiva, riproduce l'ultimo tempo del giro---
Vocelap:False
```

Under the “---EDITABLE VALUES...” you can customise some BistLap functions.

You must respect rules (decimal or default values, uppercase and lowercase) to avoid errors.

Some fields were said in detail in previous chapters, so here’s a synthesis for any of them:

led1 = manages the BistBox led (on *Pin 13*). You can make it blink to every lap setting a “**1000**” valor. You also can turn on the led if someone’s pitting with “**1002**” valor, and it’ll turn off right after the box is free. Setting a less than 1000 value, it’ll work as an *autovelo* but only in presence of a speed trap. With this last function, it’ll rapidly flash if the recorded speed is over the set value. The led will light up if I set “**20**” in the imposed field, meaning that I’m trespassing 20km/h.

Setting “the autovelo” in time screen will highlight the max speed of who went over the speed limit, and a sound alert will be played too. Decimal numbers are not allowed.

convvel = multiplies the average measured speed. On time screen, you’ll see the real speed multiplied by that value.

*For example: if the lap average speed is **9,434** km/h, you’d see **133,96** km/h if the value is “14,2”.*

mtSpTrap = distance in metres between the sensors to detect the speed (0,255 m = 25,5 cm). 3 decimal numbers are allowed.

tfuel = regulates the permanent fuel consumption (regardless of the reference time that’s set in the menu). Decimals are not allowed.

xfuel = fuel tank capacity. It influences the possible laps number with a full tank and on the refueling time. Values go from 1 to 5.

pasec = expressed time by seconds to resume from the automatic pause. Decimals are not allowed.

tStGo = served time for each penalty, expressed by seconds. Decimals are not allowed.

tStPa = the time, expressed by seconds, to serve for each penalty after a **PAUSE** state. Decimals are not allowed.

stopAlim = if *True*, maintains the lane powered while in **Stop&Go**.

PenStart = *False* or *True*. If *True*, any penalty is served at the start (for example: if a driver has 2 penalties, he won't have power on his lane at the start until the set seconds x2 in tStGo have passed).

PenPau = *False* or *True*. If *True*, every penalty will be served after the **PAUSE** state at the green lights (and not at the start).

ResetFP = *False* or *True*. If jump start is set and this field has *True* as the valor, race will be reset whenever a jump start is done and you must restart the session.

TIP: with jump start and penalties management activated, setting **PenStart=True** and **ResetFP=False** will result in an immediate stop of the driver who had a jump start. He also will stay still for another '**tStGo**' seconds *after* the green lights.

TIP₂: with jump start and penalties management activated, **ResetFP=True** has the priority on anything else and it'll reset the race in case of a jump start.

Tmedium= if *True*, it shows the medium race time instead of the "gap" field but only if there aren't **SPLIT TIMES**.

PreLap = if *True*, it shows the laps forecast at the end of the heat right next the laps number.

SemaTrasp = if *True*, when you enter in **PAUSE** (or "**bridge**"), the stoplights will appear transparent. It'll turn to visible again at countdown or by clicking on "**Enter**".

VocLap = if *True*, it vocally plays every lap time when the "**VOICE**" option in the main menu is flagged and only during Free Practice.

