

## Help pages

**Help pages: press to scroll...**

Documentation and updates can be found at:

**[www.crisartech.fr/download](http://www.crisartech.fr/download)**



### 1 « regularity » page (main page)

**Configuration button**  
(appears when pushed)

**Push to change page**

**Main page outside of RT**

**Stop or reverse**

**Change speed (simu mode)**

**Vehicle Speed**

**GPS reception quality**

**Trip1 (push to correct)**


**RT management page**

**GBR**

**Imposed speed in RT**

**Chrono, push to start or stop**

**Undo last correction**



**Bargraph:**  
yellow-red: accelerate  
blue-green: slow down

**Recommended speed (avoids the yo-yo)**

**Advance (green) or delay (red)**

**Background changes color like end of bargraph**

**Main page during RT**


**Segment compulsory speed**

**Segment in progress**

**RT in progress**

**Next GPS correction**

**Distance corrections from bottom to top (with cumulation)**



## 2 Trip modification

**Numbers for direct modification**

**Frozen distance (black) or modified (blue)**

**Delete**

**Trip in modification (continues to run)**

**Correction value**

**Add or subtract 1 or 10 m.**

**Close without modification**

**Apply the gap (correction of the frozen value, not in beginner mode)**

**Write the new prepared value (when pushed)**

The interface shows a numeric keypad (0-9, ., <-) and function buttons: Apply gap, New value, Help, and a back arrow. The display shows a frozen distance of 122.896 (black) and a correction value of -0.104 (blue). The total distance is 123.000 (black).

## 3 Stopwatch

**Start chrono manually**

**Push to switch to auto start on time**

**Check to switch to circuit mode**

**then...**

**... push the chrono value to make appear the "Stop" button**

**Manual start**

**Use the "Stop" button to stop the timer**

The interface shows a stopwatch display with a time of 10:41:00. Buttons include a hand icon, a back arrow, +30 s., -30 s., Aide, and a back arrow. The display shows a "Stop" button and a time of 0:00:31.

**2: close and wait for start time**

**Desired time for automatic start**

**1: choose auto start time (per 1' for beginners)**

**Check to switch to circuit mode**

**then...**

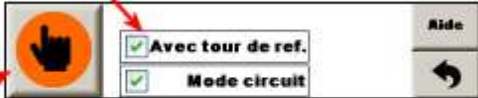
**... push the chrono value to make appear the "Stop" button**

**Start automatic on time**



**Use the "Stop" button to stop the timer**

The interface shows a stopwatch display with a time of 10:42:00. Buttons include a clock icon, a back arrow, +30 s., -30 s., Aide, and a back arrow. The display shows a "Stop" button and a time of 0:00:31.

**1: check**



**2: start at the beginning of the reference lap**

**Circuit mode with reference lap**

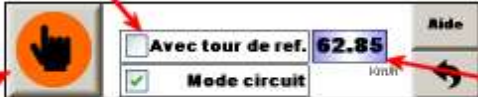
then...

...push the button when passing on the chrono line (press chrono value if button disappeared)

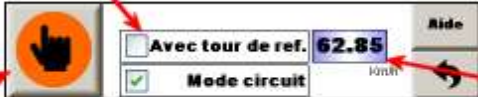
Number of laps 0: reference lap → 4

Use the "Stop" button at the end of the last lap



**1: uncheck**



**2: enter the speed imposed, measured or calculated**



**3: start on the chrono line**

**Circuit mode without reference lap**

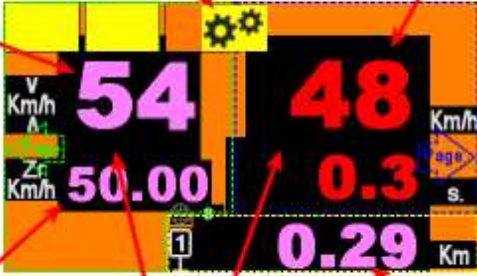
then...

...push the button when passing on the chrono line (press chrono value if button disappeared)

Number of laps → 4

Use the "Stop" button at the end of the last lap

4 « pilot » page



**Configuration button (appears when pushed)**

**Vehicle Speed**

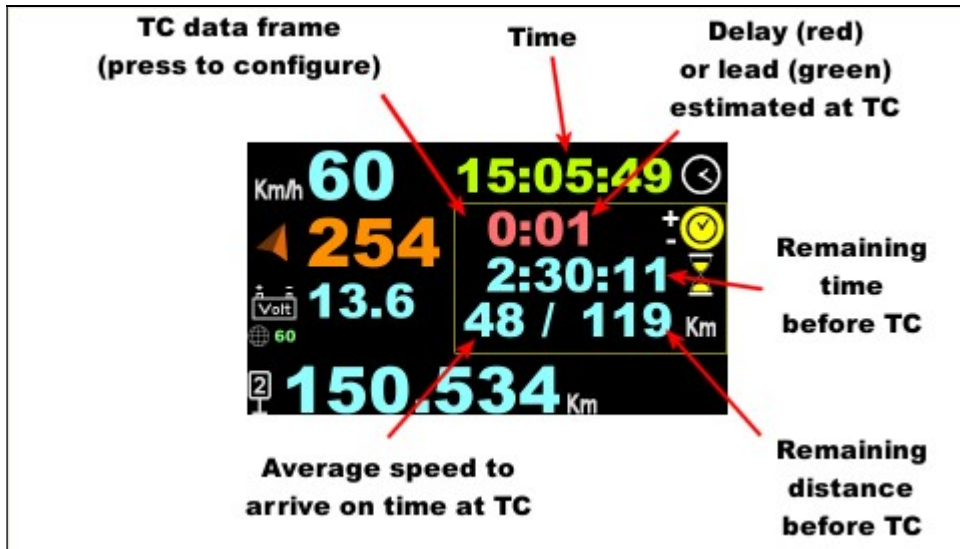
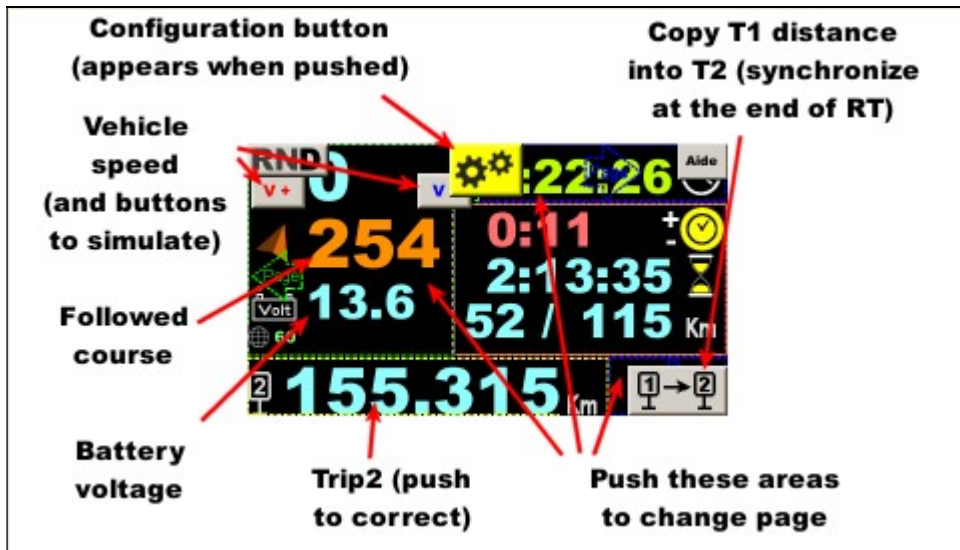
**Recommended speed (avoids the yo-yo)**

**Average speed for the segment**

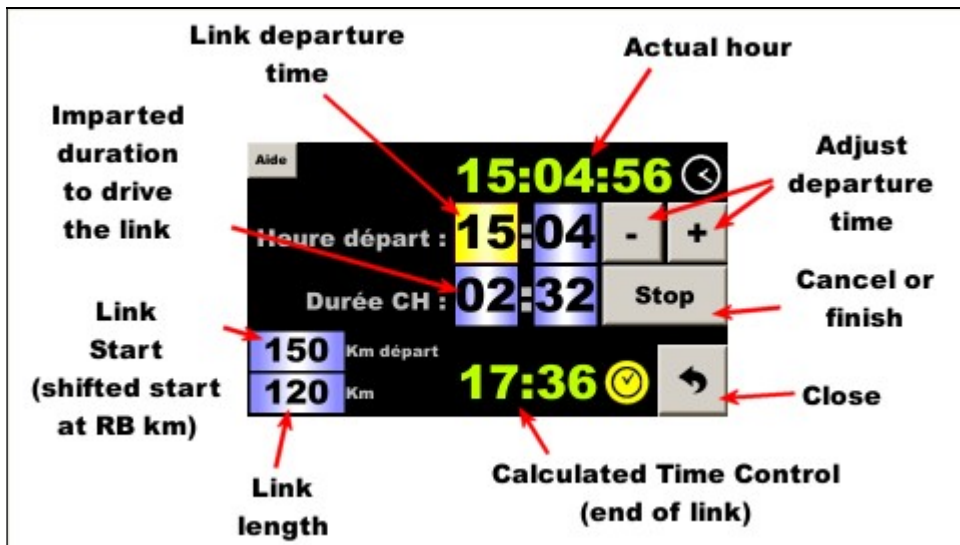
**Push these areas to change page**

**Trip1 (push to correct)**

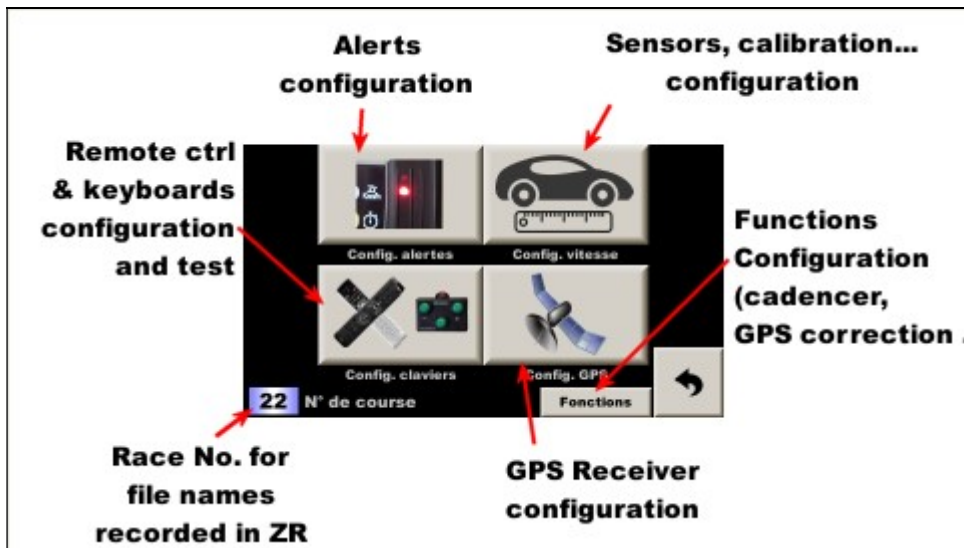
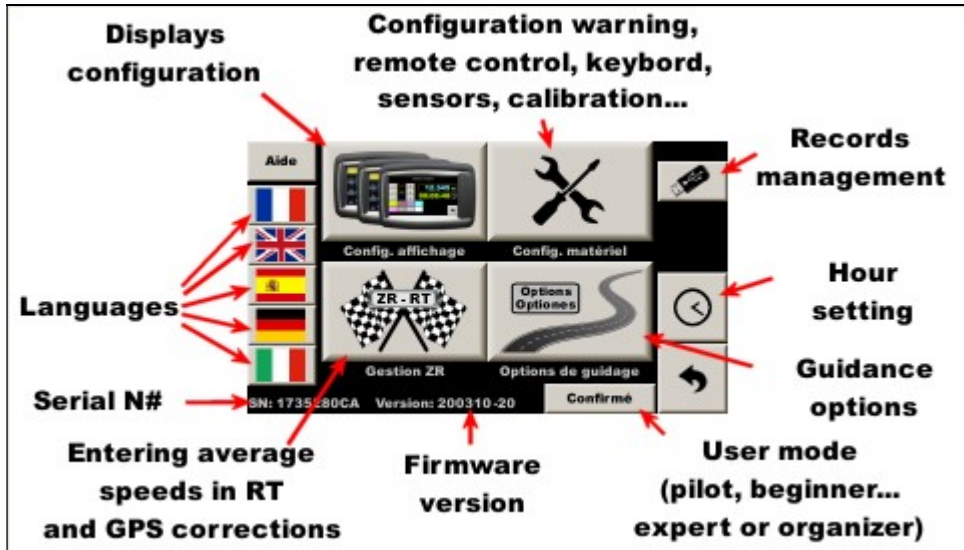
5 « link » page



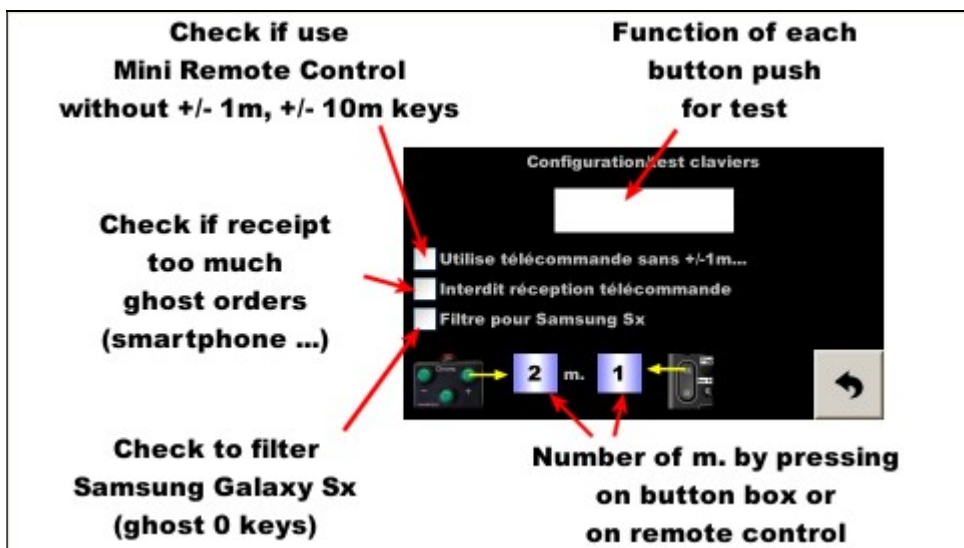
set ideal TC hour:



## 6 Configuration



### 6.1 Infrared remote control and button box configuration and test



## 6.2 Sensors configuration, calibration...

**1: choose type of connection**

**4: go to calibration page**

**2: in OBD choose the vehicle type (OBD 11 bits or 29 bits are ok everywhere but are less accurate)**

**3: if proposed, choose distance computation method as done by the organizer**

**Close**

**Wheel sensor monitoring:**  
(help with connecting the sensors)

**To compare L wheel with R wheel**

**maximum error tolerated before alert**

**monitoring distance**

**Popup displayed if error detected:**

**To compare wheels with GPS**

**Give a name to the calibration**

**Tires centrifugal swelling compensation (expert mode)**

**"Mountain" corrections**

**Edit calibration on the fly or bt +/- 1m (except beginner mode)**

**Type here the calibration value, if it is already known**

**Coefficient to apply to calibrations**

**Wheel or OBD calibration**

**Add or remove 0.1 m. per km (key +/- 1 m. remote control)**

**Paste coef. of normalization or manual corrections**

**GPS calibration (check box previous page)**

**Add or remove 1 m. per km (key +/- 10 m. remote control)**

**Validate**      **Cancel**

**1: choice of Trip1 or 2 or a distance freely copied (compute without drive)**

**2: Reset at calibration zone start**

**3: drive the zone or type in the distance**

**5: compute**

**Calibrate the GPS at same time**

**4: Type calibration distance given by the organizer**

**Close**

**In "sensor" mode, for GPS based calibration (fast but not very precise):**

**Connection configuration (sensors, OBD, GPS...)**

**1: click GPS mode**

**2: drive in straight line**

**3: compute while driving**

**Check each sensor pulses (if available)**

### 6.3 Distances/speed management during RT

**RT are recorded in files**

**Theoretical chrono at the end of segment**

**RT choice**

**MultiSpeeds mode**

**One line for each speed (segment)**

**km of beginning and end of segment**

**Speed on the segment (km/h)**

**Trip1**

**Close**

**Scroll the lines**

Ind	Début	Fin	Vitesse	Temps	Aide
1	0.000	3.658	48.32	4:32.5	
2	3.658	5.215	46.36	6:33.4	▲
3	5.215	8.698	49.99	10:44.2	▼
4	8.698	12.375	47.02	15:25.7	↺

**'Gravel crew' or semi-auto corrections notes**

**GPS auto-corrections**

**New RT**

**Save RT**

**Changing speeds**

**Delete ALL data of ALL RT**

**Shifted start: starting distances point choice**

**Exchanges with USB**

**Modify the shifted start distance during RT**

### 6.4 Automatic corrections by GPS

**Points are recorded in the file at each addition**

**Duplicate (if multiple passages in the race)**

**RT table display**

**Total number of points**

**Next file**

**New file**

**Adjust distances**

**Distance since last manual point**

**Delete the last point**

**Trip1**

**GPS reception quality**

**Scroll the lines**

Ind	Km	Latitude	Longitude	Commentaire	Début	Fin
275	13.069	48.45465	6.92088	156		
276	14.019	48.45428	6.92127	142		
277	14.069	48.45390	6.92166	140		



**GPS points manual entry**

**1: type a comment (optional)**

**2: add a point**

**GPS points automatic entry**

**It remains possible to enter a point manually between 2 automatic points by pressing the yellow button**

**1: type distance between two points**

**2: check**

**Text generated by buttons**

**Keyed text**

**Number pad**

1 : Danger virage	2 : Chemin / Route	3 : Danger trou / bosse	Aide
4 : Poteau	5 : Stop	6 : Place / Terre Plein	
7 : CSP	8 : Chicane	9 : Panneau	<-
* : Arbre	0 : Borne	C - C +	↶ ↷
Départ	Arrivée	C1	Ok

**Remove the text**

**Close without modification**

**Validate**

**Go directly to the directions (right, across, left ...)**

**Auto-incremented index (Road-book box or PK for example) Modified with +/- 1 m. keys**

**Move the starting position:**

**1: enter the distance difference between new and old start**

**2: Select whether the new departure is before or after the original departure**

**3 : push button**

**Match to a road-book box on the road:**

**1: type distance exact of the box**

**2: check that it corresponds to the previous correct point (not in beginner mode)**

**3 : push button**

**4: button to adjust calibration if necessary**

**Match the boxes from the road book at the end:**

**Enter distances from the organiser's road-book**

Ind	Commentaire	Mesuré	Orga.	Diff.	Nbr : 14
1	Depart	0.0	0.0	0	
12	C 49	0.52	0.525	-2	
21	C 50	0.955	0.958	-3	
33	C 51	1.529	1.53	-1	
54	C 53	2.572	2.57	2	
86	C 55	4.167	4.164	3	
92	C 57	4.452			
109	C 58	5.276			
120	C 59	5.83			
126	C 60	6.101			
144	C 61	6.982			

**Number of lines**

**Display differences graphically**

**Delete entered distances**

**Proposed index for normalised file (will be created)**

**Start normalization**

**Configuration des corrections par GPS** Aide

- 0.015 Dist. mini entre points saisis (km)
- 0.012 Correction maxi (km)
- 60 % de correction de distance
- 0.300 Détection manque de correction (km)
- 20 Vitesse mini pour correct. (km/h)
- "Auto Km" activé après appui bouton

**If the point entered is too close to the previous one, proposes to delete the previous point**

**Limit corrections to avoid jerks in areas of poor reception**

**If you drive this distance without correction, then launch "GPS Magic" function**

**Activates "Auto Km" after entering a manual point**

**Speed below which corrections are ignored**

### 6.5 'Gravel crew' notes management

**Points are recorded in the file at each addition**

**Import distances from distances / speeds file**

**Delete the last point**

**Total number of points**

**Scroll the lines**

**Distance added during import**

**Distance to anticipate the announcement**

**1-Enter distance: keyboard or remote control**

**Optional popup in RT**

**2-Button for semi-auto correction or button marker / difficulty**

**New file**

**Distance** **Repère** **Supprime**

Ind	Km
72	23.340
73	23.604
74	23.775

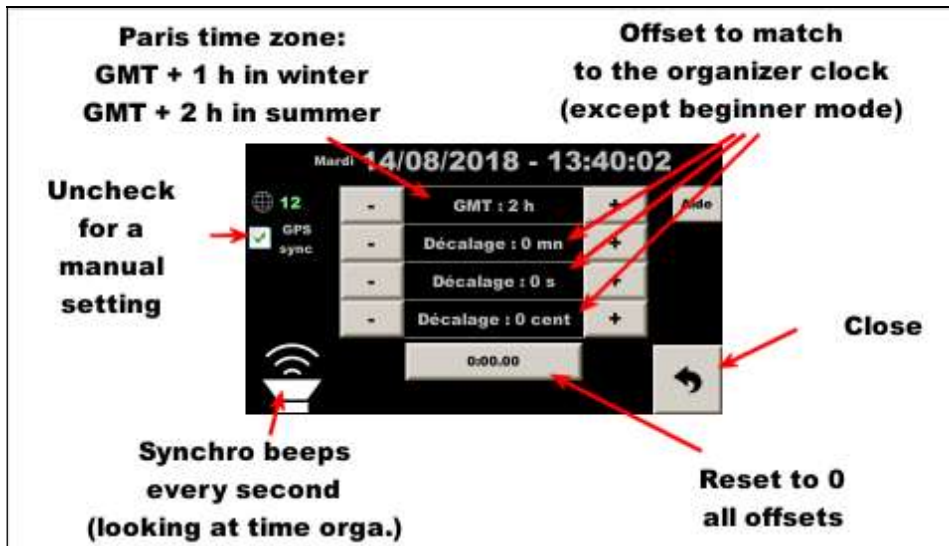
23.775 Km

0.000

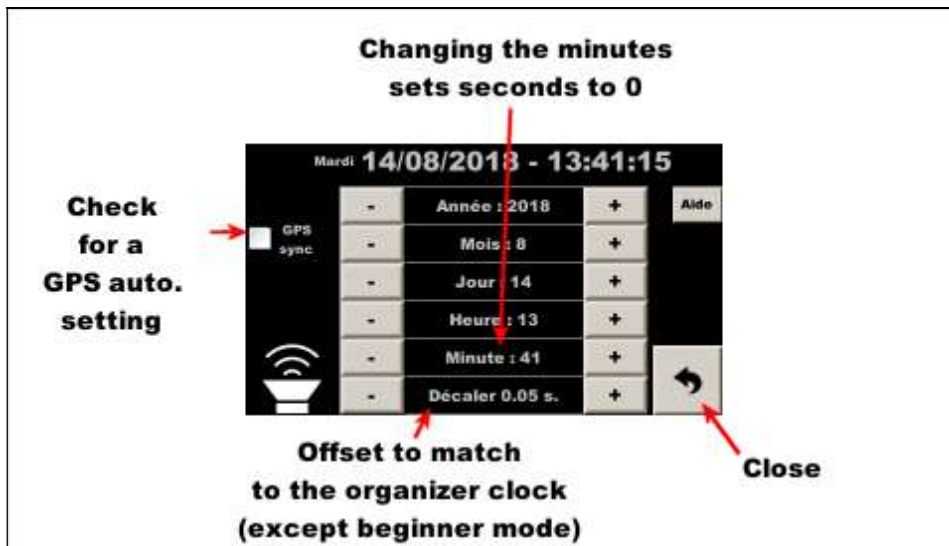
0.200

### 6.6 Date / hour setting

with GPS auto-synchronisation:



manual setting:



## 6.7 Guidance options

**Enable the notes for semi-auto correction or 'gravel crew' notes**

**Speed difference guidance is recommended to avoid the "yo-yo" effect**

**Check if pilot screen connected**

**Option for colour blind**

**Lead/delay calculation 2 times faster**

**Inverting red/green of LEDs or display**

**Countdown beeps for Italian pipes (option)**

**Increase for less beeps, but less accurate (not in beginner)**

**Adjust lighting power (screen and Leds)**

**Beep: low tone to slow down or acute to accelerate. Set the level here or on remote control:**

**To use 2 LED6 modules (one for lead and one for delay)**

**Enable the auto. correction by GPS**

**Check to enter points "all automatic"**

**Check if T1 is not reset to 0 at RT start**

**Automatic start detection by GPS**

**Trip2 is replaced by Trip1**

**When T1 reset to 0 makes T2 reset to 0**

**Info on distance differences compared to GPS (expert mode)**

**To take into account +/- 1 to 10 m. corrections in refining the calibration**

## 6.8 Display configuration

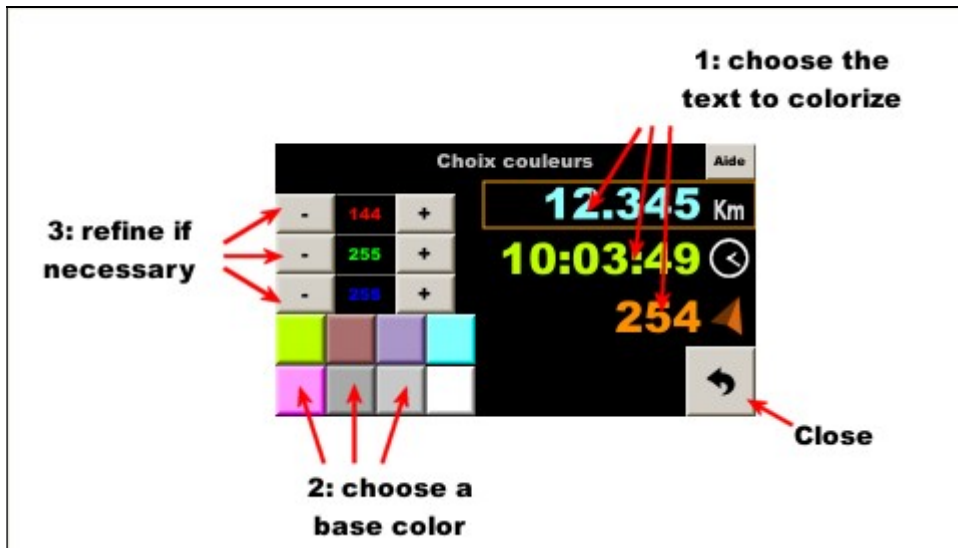
Press the thumbnails of unwanted pages. A cross indicates that they are no longer displayed.

Press in the lower right corner to select the default page (green check mark).

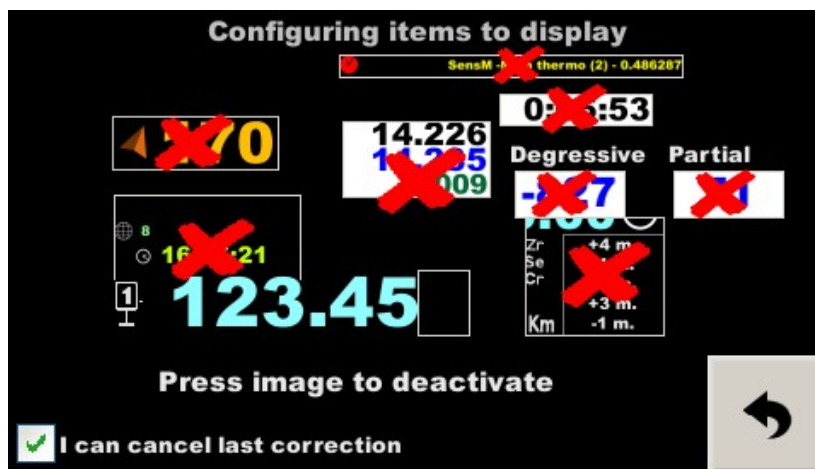
Press the "Config" button to configure the display of certain pages:



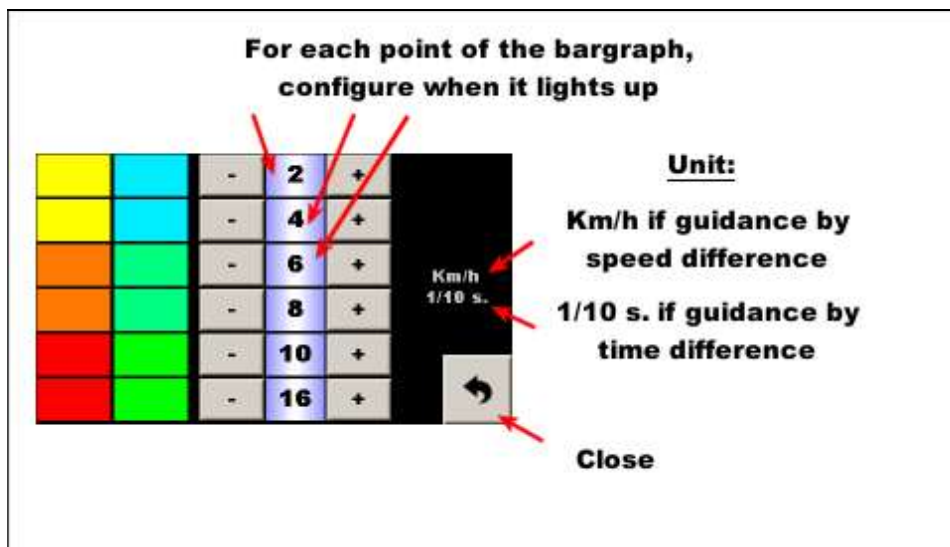
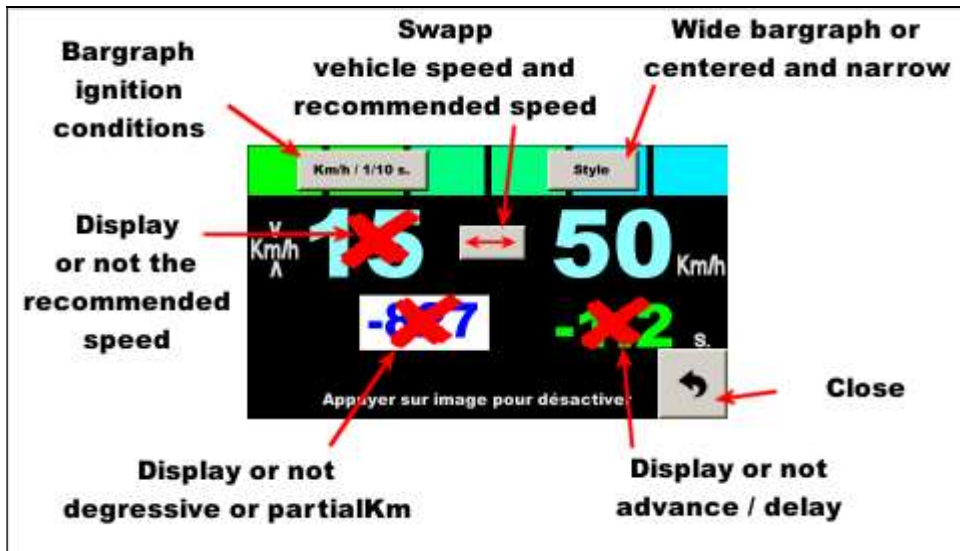
Press the color palette button to set the text color:



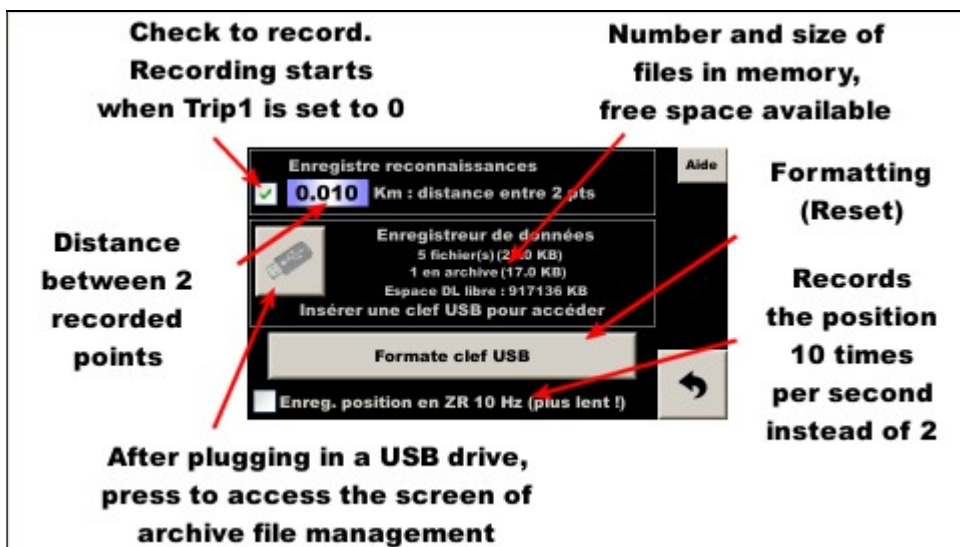
« codriver » page, remove some information pressing on images:



« pilot » page (configures also RP380/400 if connected):



## 6.9 Files recording



**RT preparation files:**

- average speeds
- GPS corrections
- 'gravel crew' notes
- GPX (export only)

**Other recorded files:**

- during the race
- during scouting
- calibrations ...

**RT table display**

**Copy / delete archive files (if exist on internal disk)**

**Software update (if found on the USB drive)**

The screenshot shows a software interface with three main menu items: 'Importe donnees ZR (moyennes, GPS...)', 'Exporte donnees ZR (moyennes, GPS...)', and 'Exporte enregistrements (ZR, recos...)'. To the right, there are buttons for '?', 'Aide', a refresh icon, and a back icon. Red arrows point from the text labels to the corresponding menu items and buttons.