Pumptrack

GARMIN APPLICATION

User manual

Date of last revision

August 14, 2025

Always want to stay informed ?

Pumptrack application webpage:
https://www.jeanmichelgruber.com/pumptrack-eng.html

Updates news: https://www.jeanmichelgruber.com/blog-eng.html

YouTube channel: ▶ YouTube Surfy66 channel

Twitter / X account: 𝕏 @Surfy66

If you want to contact me by email, here the addresses:

rachma07@live.fr or contact@jeanmichelgruber.com

Design - Programming - Aesthetics

Jean-Michel Gruber © 2018 - 2025

Stéphane ANDRE: a surf skater for over 40 years and ambassador for the **Long Island** (boards) and **Jonsen Island** (cloth) brands, he gave a surfskate demonstration at the opening of the skateboarding event at the **2024 Paris Olympics**.

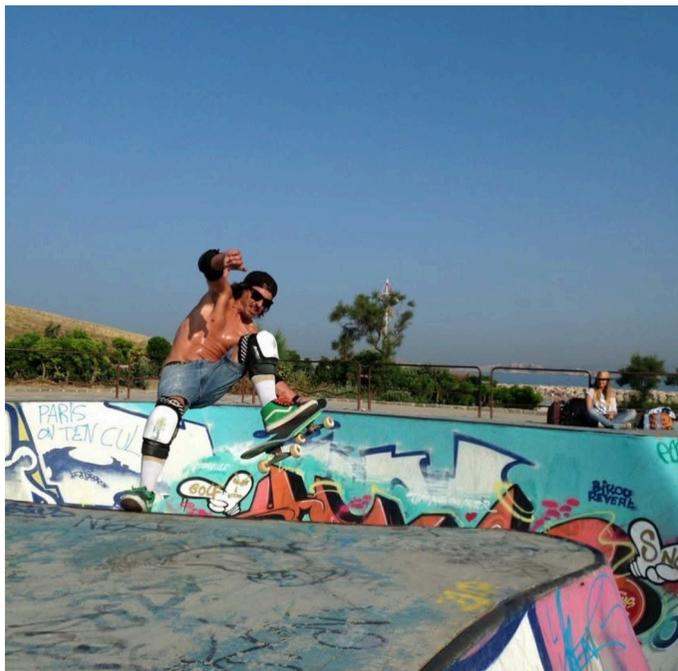https://www.facebook.com/stfandre?locale=fr_FR

https://www.instagram.com/stfandre/reels/

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Important information regarding the process of purchasing and installing the application

As the procedure is not automated, the response to your purchase always takes place, in principle, within 12 hours maximum, by sending a confirmation email.

If despite everything you have not received a response from me within this period, check that your PayPal address is correct, or that my response has not fallen in your spam box.

Thanks in advance.

Given its complexity, and the number of features offered in this app and, as well as the time required for its development and maintenance, the price of this application is set to

12 USD

Please note that this is a one-time purchase (no subscription, no renewal of purchase , etc).

In other words, your purchase and activation code are valid ... lifetime!

In order to be able to calculate your personal activation code, please send me an additional email which will contain the following information:

your ID number, appearing in the pop-up window each time the application is started (as a valid activation was not entered in the application).

You can also find this identifier by going to the following menu:

« **Tools → Activation Code → ID Number** »

Upon receipt of your email containing this identifier number, I will reply to you by sending another email, which will therefore contain your activation code as well as some other additional information that could be useful.

Trial period / testing the application

Users without a registered license have the possibility to start a session and test the application for a maximum of 20 minutes, each day. During this period, all data and metrics are properly calculated, and will therefore be saved into the FIT file.

Arrived at the end of the 20 minutes, the application will then automatically switch to pause / stop session mode: here, you will always have the possibility to browse all the screens (to see the results on the screen), or to leave the session, either saving it or ignoring it.

The duration of 20 minutes can be combined on the same day: 1 session of 20 minutes, or 2 sessions of 10 minutes, etc.

Entering the activation code

To enter your activation code:

• just launch the Pumptrack application installed on your watch (list of your apps + **START** key) then, enter its menu (long press on the UP key or swipe left) then go to:

Tools menu → Activation Code → Unlock Code

If the code corresponds to what it should be, a popup window informs you of the success of the operation; otherwise, you are prompted to repeat the operation (perhaps you made a mistake in entered on one of the digits of the code?).

Your identifier number is unique and corresponds only to the application which it has been calculated for, so you will not be able to transfer it to another application, or otherwise.

Despite all the care taken with this application, and depending on the technical changes made to the development SDK by Garmin, as well as possible malfunctions linked to the firmware of each model (bugs introduced by Garmin, installation of beta versions on your watch, etc.), the application may not behave as expected. Consequently, rather than publishing bad comments on the site, please contact me directly by e-mail to inform me of the problem, and I'll do what's necessary to rectify it as soon as possible.

Thank you in advance.

Please, feel free to enjoy !

Features offered by the application

The first application in the Garmin store for the practice of pump tracks, with skateboard, roller blade, scooter and bikes

Six screens are available:

▪ **screen 1**: main screen (current speed, the number of laps made since the start of the session, the distance traveled, the temperature, the time in stop / pause mode, or the chrono in walk mode, and the GPS signal quality indicator (green = good, orange = average, red = poor or non-existent), and your heart rate with colored heart rate zones

▪ **screen 2**: screen of the current session (heart rate with colored HR zones, data of the lap in progress, the number of laps made since the start of the session)

▪ **screen 3** (only for models > 64 Kb of memory): shows the same data as screen 2, but in graphic form, with the addition of the time (in 12/24 hour format) and the current speed (see descriptive image below for further explanation)

▪ **screen 4**: mapping screen (compatible models), with outline of the route of the session

▪ **screen 5**: screen of the best lap made, on the session and on all sessions combined (alternately)

▪ **statistics screen**: session and global statistics (total number of laps, total time and distance, average and max speed, average and max HR)

▪ **end of session screens**: displays a summary of the main data obtained during the session

The FIT file stores the following data:
all standard data (distance, speeds, heart rate, calories, etc.) calculated by the watch firmware

— **in the form of laps**:
▪ each track lap with, as recorded data, the time, distance, average and max speed, average and max HR for each lap

— **in the activity summary area**:
▪ duration and distance of the best lap
▪ average and max speed of the best lap
▪ average and max HR of the best lap
▪ the number of laps and continuous laps of the session
▪ rating of your session (ranking session)

Note:

— all the metrics are calculated and saved separately for each kind of activities offered by the app.That means that if you change activities within the app, you will get and collect different data on the screen

Note regarding models with semi-octagonal screen (Instinct 2, 2S and Descent G1):
due to their lower amount of memory, and their monochrome screen truncated by the physical circle, the application has the following differences compared to other models:
▪ no display of global statistics
▪ no ability to assign scores/stats
▪ no second end of session screen

Apart from these differences, all the other functionalities are strictly identical to the other models.

If you have a Strava account (linked to your Garmin account), all of the compatible FIT data will also be automatically transfered to it.

— *Note*

all the options set in the menu are permanently saved into the watch so, no need to configure them each time you launch the application.

Watch models compatible with the application

Rather than listing all the watch models for which the application is compatible (it would be far too long!), I'm going to indicate the non-compatible models here instead, so if your model doesn't appear in the list below, it means that your watch is indeed compatible with this application:

The download of the applicaion is available on the Garmin Connect site, here: https://apps.garmin.com/apps/58f7738b-2293-463d-ab4f-8a4b71f8ca8a

Once the application is installed on the watch, you can see the release informations by going to the "**Tools → App Version**" menu.

Non compatible models
Approach S60
Tous les compteurs vélo (série Edge)
Forerunner 55
Forerunner 920XT
Tous les GPSMAP
Instinct Crossover
Montana / Oregon / Rino 7 Series
Vivoactive
Vivoactive HR

Entering the activation code

For all watch models, the activation code is entered directly from the application menu:

launch the app from your watch (select it in the apps list then press the **START** key), you enter the main screen of the app then, long press to the **UP** key (or swipe left on touchscreen devices) then go to "**Tools → Activation Code → Unlock Code**"

When your activation code is not already set and saved into the app, you will find, within this menu, your ID number instead.

When starting / launching the application

You will be first greeted with a welcome popup screen. This screen, which will be displayed during about 5 seconds, also shows you the current version number of the application, which allows you to see, at a glance, whether it is up to date or not.

Preparing and using the app

▪ launch the application, like any other application

▪ first, you should set the application to your needs (background color, units, etc.). To do this, enter the application menu (long press the **UP** button) and select the parameters at your convenience. All the choices made in the menu are permanently stored on the watch so there is no need to re-enter them each time the application is launched

▪ first of all, you should configure the application to your liking (background color, units, etc.). To do this, enter the application menu (long press on the **UP** button) and select the settings at your convenience. All the choices made in the menu are stored permanently on the watch, so there is no need to re-enter them each time the application is launched

▪ once all the application parameters are set (type of activity, etc.), you can exit the menu to return to one of the application screens

▪ to start a session, just press the **START** key the watch

▪ at the start of the session, your GPS position is recorded automatically, it is this position which will determine the counting of the number of laps. The display of the Loc label. then appears in green, at the top right of the main screen.

▪ the laps are managed automatically: each time you complete a lap of the track, the number of laps is incremented by 1. As well as the calculation of the number of consecutive laps, without stopping

▪ scrolling between screens is achieved by just pressing the **UP** or **DOWN** key. When the wide screen is displayed, **UP** and **DOWN** keys change the type of data displayed on the top and bottom fields

▪ you can pause the session manually by pressing the **START** key then "**Pause**" menu, and resume recording with a second press on the same key then, « **Resume** » menu (pause = orange dots, active = green dots, stop = red dots)
An Auto Pause feature allows you to pause the session automatically each time your speed drops below 0.6 mph. This option can be activated or deactivated (depending on your preference) via the "**Options → Auto-Pause**" menu

▪ to end the session, you press the **START** key, a menu appears, proposing you to either reject or save the session. Then, a summary screen will be proposed to you, summarizing the main data of the session

▪ to quit the application in stop mode (when no session has been started), click on the **LAP** button, not on the **START** button

▪ the current time is displayed in the following 3 modes: when the application is waiting to be

launched, in pause mode, and when the session is active, if the time option has been selected (or the hour - stopwatch display in alternate mode)

Adding a new lap

Each lap of the track automatically increments the counter for the number of laps, as well as the counter for the number of consecutive laps without stopping.

Each new lap recording triggers the popup below, to let you know that the new lap has been taken into account.

Low battery indicator

During the session, when the battery level reaches 5% or less, the background color of all the screens of the application changes to garnet red, telling you that you only have a few minutes of battery life left, depending your device model...

Scores Menu

Access to score management is via the "Tools → Scores" menu.

View the global statistics

Ecran des statistiques globales / Global statistics screen

Menu to access global stats
Menu pour accéder aux stats globales

Scores

View
Global Statistics

Reset
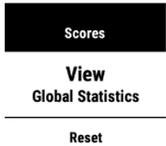
Average values all
over the session

Valeurs moyennes sur
toutes les sessions

Up/Down

01:24 • Time • 04:16
0.81 Km • Dist. • 2.34 Km
159 • Heart Rate • 161
5315 • Calories • 6773
6 Sessions
31.88 • Avg Spd • 33.11
34.20 • Max Spd • 36.61

Start/Back

GARMIN

Max values reached during
a session

Valeurs max atteintes au cours
d'une session

Ecrans graphiques des 8 dernières sessions / Graphical screens of the last 8 sessions

Menu to access global stats
Menu pour accéder aux stats globales

Scores

View
Global Statistics

Reset

Up/Down

17.64 km/h   2.53 Km

Last 8 sessions

HR: 149   1104 kcal

Start/Back

GARMIN
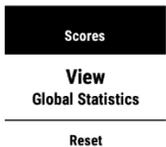
Yellow: distance / Jaune: distance
Orange: max speed / vitesse max
Blue: average speed / vitesse moyenne

Green / vert: calories
Red: HR / Rouge: FC

Reset data / scores

You have the option to reset two types of data:

- only the best scores: your records, better performances, best lap

- all values: the best scores + all the data recorded over all your sessions ("Stat" screen)

Note that the reset is an irreversible function, all data will be lost after this action!

Assign values / scores

This feature allows you to manually assign a value to the data displayed on the "Stats" screen. This can be useful for example in the case of a replacement / change of your watch, and you do not want to loose all your global statistics. The data entry follows the same order as the data displayed on the "Stats" screen, to simplify your input.

Minimalist / Wide Screen

This screen presents the essentials and the minimum information, with an extended font (time, chrono, current speed, and colored arches - see the meaning of these arcs on the descriptive image below). This screen is easily readable during navigation, especially for surfers with a visual weakness and who can not wear their glasses in navigation.

What you can choose to display on this screen:

▪ **top**: time / current speed / average speed / max speed (orange) / distance / # laps / lap time / lap distance / heart rate

▪ **in the center**: hour / chrono / alternate

▪ **below**: time / current speed / average speed / max speed (orange) / distance / # laps / lap time / lap distance / heart rate

This screen is activated in the "**Wide Screen → Display** (Disabled / Enabled)" application menu.

When it is activated, it is displayed when the session is started and therefore active. When you put the session in pause mode, this screen disappears to make room for all other screens, so you can, for example, see your performance / detailed information when you pause. When you restart your session, the minimalist screen reappears again.

When this screen is selected and displayed:

▪ pressing the **UP** key changes the data displayed in the top field according to the selection you made in the **Wide Screen - Top Field** menu. On watches with a touch screen, a long press on the top area produces the same effect

▪ pressing the **DOWN** key changes the data displayed in the bottom field according to the selection you made in the **Wide Screen - Bottom Field** menu. On watches with a touch screen, a long press on the bottom area produces the same effect

You can also scroll through the data you've selected automatically, without having to press the **UP** and **DOWN** keys or the touchscreen. Each data item remains on the screen for around 3 seconds, then moves on to the next, and so on. You can select automatic scrolling independently for the upper or lower field, or both.

Note that when automatic scrolling is activated, you always retain control over manual scrolling by pressing the keys or touchscreen.

This automatic scrolling option can be activated or deactivated via the menu "**Wide Screen → Auto Scroll Up**" for the upper field, or "**Wide Screen → Auto Scroll Down**" for the lower field.

Change up data fields
Change les données du champ supérieur

Change down data fields
Change les données du champ inférieur

Current lap average speed over average speed of the best lap of the session
Vitesse moyenne du tour actuel par rapport à la vitesse moyenne du meilleur tour de la session

Current lap distance over distance of the best lap of the session
Distance du tour actuel par rapport à la distance du meilleur tour de la session

Time/Current speed/Avg speed/Max speed/#laps/HR
Heure/Vitesse actuelle/Vitesse moyenne/Vitesse max Nb de tours/FC

Time, Chrono or alternate (green color = session is running)
Heure, Chrono ou alterné (couleur verte = session active)

Current lap duration over duration of the best lap of the session
Durée du tour actuel par rapport à la durée du meilleur tour de la session

This screen is intended to be easily readable during navigation, with minimalist data displayed in wide font.
You can activate or not this feature by setting the Wide Screen -> display on/off menu

Cet écran a pour but d'être facilement lisible durant la navigation, avec le minimum d'informations affichées en forte police.
Vous pouvez activer ou non cette fonction dans le menu Wide Screen -> display on/off

GPS constellations

Due to hardware limitations imposed by Garmin on the firmware of their various watch models, this feature is only compatible with models that can support a version equal to or higher than SDK **3.2.x**.

If you find that your GPS track is not accurate enough, you can modify, directly into the application, the GPS constellation used by the application. You will have the choice between several constellations, only those which are compatible with your specific watch model, and available on it at a given moment. This option is activated by the menu "**Options → Constellation**", and thus avoids you having to do it outside the application, before its launch! Simpler, and faster than ever.

– Note

as Garmin updates your watch's firmware, the number and type of these constellations may vary in the future so, check the list in the corresponding menu from time to time.

Features specific to touch screens

On the majority of models with a touch screen (some older models are not compatible with this feature), you can directly access certain common functions via two types of screen shortcuts:

- a short press (just tap on screen) on a delimited area of the screen

- a long press, either on a delimited area, or anywhere on screen

Ecran principal et écran Stats / Main and Stats screens

Long press: change the activity
Appui log: change l'activité

Long press: while no session is active (or in pause mode), entering the scores window
Appui long: lorsqu'aucune session n'est active (ou en mode pause), entre dans l'affichage des scores

Short tap: while session is running, swap from timer to time of the day, alternatively
Long press: opens the quick access menu
Appui court: lorsqu'une session est active, permute entre l'affichage du chrono et l'heure
Appui long: ouvre le menu d'accès rapide

Short tap: while session is running, swap from timer to time of the day, alternatively
Long press: change the background color
Appui court: lorsqu'une session est active, permute entre l'affichage du chrono et l'heure
Appui long: changement de la couleur de fond

Quick access menu

On models with a compatible touch screen, and compatible with SDK version **3.4.0** minimum, a long press on the lower right area of the screen opens a quick access menu to certain functions, thus saving you from having to navigate the main menu and its sub-menus to access these functions. However, this function can only be used in stop or pause mode, to prevent this menu from being triggered during a session.

On compatible non-touchscreen models, access to this quick menu is via a long press on the **BACK/LAP** button.

Ecran principal / Main screen   **Deuxième écran / Second screen**

Temperature (sensor)
Température (capteur)

Location of the starting
point = Ok
Localisation du point
de départ = Ok

#continuous laps without stop
Nb de tours sans s'arrêter

#laps
of the session
#tours
sur la session

Total distance of
the session
Distance totale
de la session

Heart rate
Fréquence cardiaque

Best Lap and Stats Screens (Session and Global) / Ecran du Meilleur Tour et Ecran Stats (Session et Global)

Best lap data (session and global)
Données du meilleur tour
(session et global)

#continuous laps without stop
Nb de tours sans s'arrêter

total laps (all sessions)
Nb total de tours (toutes sessions)

Distance + Time of
the best lap
(session and global)

Distance + Temps du
meilleur tour
(session et global)

Total distance + time
(session and global)

Distance + Temps total
(session et global)

Avg + max speed of the best
lap (session and global)
Vitesse moyenne et max du
meilleur tour (session et
global)

Avg + max HR of the best
lap (session and global)
FC moyenne et max du
meilleur tour (session et global)

Avg + max speed (session
and global)
Vitesse moyenne et max
(session et global)

Avg + max HR (session and global)
FC moyenne et max (session et
global)

First and second screens

Main screen / Ecran principal

Temperature / Température

Activity icon
Icone de l'activité

#laps of the session
#tours de la session

Time/Chrono
(green = session active,
orange = session paused,
red = stopped)
Heure/Chrono
(vert = session active,
orange = session en pause,
rouge = arrêt)

Enter the menu
Entrée dans le menu

Switch screens
Défilement des écrans

Current speed
Vitesse actuelle

Current HR with HR colored zones
FC actuelle + zones de FC colorées

GPS signal quality
Qualité du signal GPS

Location of the starting
point = ok
Localisation du point de
départ = ok

Avg + max speed of the current
lap
Vitesse moyenne et max du
tour actuel

38°
6 1007
laps Dist. Mt
00 : 01 : 50
km/h   km/h
32.4
162

Session screen / Ecran de la session

#continuous laps without stop
Nb de tours sans s'arrêter

Temperature / Température

Distance of the current lap
Distance du tour actuel

Time of the current lap
Temps du tour actuel

Start/End session
Lancer/stopper session

Session status
(green = active,
orange = paused,
red = stopped)
Status de la session
(vert = active,
orange = en pause,
rouge = arrêt)

Pause/resume session

Avg + max HR of the current
lap
FC moyenne et max du
tour actuel

38°
71
5 00:07
cont. laps Dist. Mt • mn:s
Speed • km/h HR
32.97 162
32.99 162
162

Third screen (graphical screen)

Graphical screen (third screen) / Ecran graphique (troisième écran)

Current lap duration over duration of the
best lap of the session
Durée du tour actuel par rapport à la
durée du meilleur tour de la session

Current lap distance over distance of
the best lap of the session
Distance du tour actuel par rapport à
la distance du meilleur tour de la session

Current lap average speed over average speed of
the best lap of the session
Vitesse moyenne du tour actuel par rapport à la
vitesse moyenne du meilleur tour de la session

Time (12/24 format)
Heure (format 12/24 h)

Current speed (km/h or mph)
Vitesse actuelle (km/h ou mph)

19:18
17.6
kts

Current lap avg HR over avg HR of the
best lap of the session
FC moyenne du tour actuel par rapport à la
Fc moyenne du meilleur tour de la session

Best Lap screen

Best Lap Screen (Session and Global) / Ecran du Meilleur Tour (Session et Global)

#continuous laps without stop
(session)
Nb de tours sans s'arrêter
(session)

Avg + max speed of the best lap
Vitesse moyenne et max du
meilleur tour

Best Lap
166
5 00:17
cont. laps Dist. Mt • mn:s
Speed • km/h HR
32.68 162
35.00 162
Session

Distance of the best lap
Distance du meilleur tour

Time of the best lap
Temps du meilleur tour

#continuous laps without stop
(best lap of all)
Nb de tours sans s'arrêter
(meilleur tour global)

Avg + max HR of the best
lap
FC moyenne et max du
meilleur tour

Best Lap
176
7 00:19
cont. laps Dist. Mt • mn:s
Speed • km/h HR
33.20 162
35.27 162
Global

Stats screen

Stats Screen (Session and Global) / Ecran Statistiques (Session et Global)

#laps of the session
Nb de tours sur la session

Total distance of the session
Distance totale de la session

Total time of the session
Temps total de la session

Avg + max speed of the session
Vitesse moyenne et max sur la session

Stats
377
2 00:41
laps Dist. Mt • mn:s
Speed • km/h HR
33.22 161
35.00 162
Session

#laps (all sessions)
Nb de tours (toutes sessions)

Avg + max speed (all sessions)
Vitesse moyenne et max
(toutes sessions)

Avg + max HR of the session
FC moyenne et max sur la session

Global distance (all sessions)
Distance globale (toutes sessions)

Total time (all sessions)
Temps total (toutes sessions)

Stats
5211
8 09:05
laps Dist. Mt • mn:s
Speed • km/h HR
33.17 160
36.61 162
Global

Avg + max HR (all sessions)
FC moyenne et max (toutes sessions)

End-of-session screens

First end of session screen / Premier écran de fin de session

Total number of laps of the session
Nombre total de tours sur la session

Total distance of the session
Distance totale de la session

Duration of the session
Durée de la session

Average HR of the session
FC moyenne au cours de la session

Average speed of the session
Vitesse moyenne de la session

Max speed of the session
Vitesse max de la session

Max HR of the session
FC max au cours de la session

Second end of session screen / Second écran de fin de session

Duration of the session over the
longest duration of a session

Durée de la session par rapport à la plus
longue durée d'une session

Distance of the session over the
longest distance of a session

Distance de la session par rapport à la plus
longue distance d'une session

Average speed of the session over the
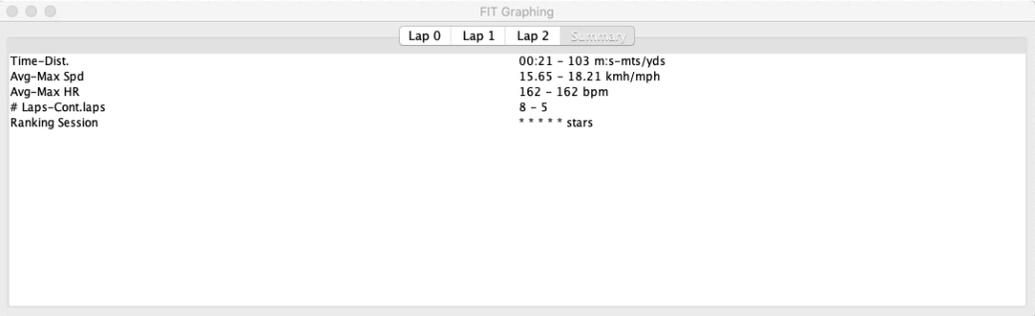best average speed of a session

Vitesse moyenne de la session par rapport
à la meilleure vitesse moyenne d'une session

Average HR of the session over the
best average HR of a session

FC moyenne de la session par rapport
à la meilleure FC moyenne d'une session

15

Data saved into the FIT file

FIT Graphing

| Lap 0 | Lap 1 | Lap 2 | Summary |

Time–Dist.	00:21 – 103 m:s–mts/yds
Avg–Max Spd	15.65 – 18.21 kmh/mph
Avg–Max HR	162 – 162 bpm
# Laps–Cont.laps	8 – 5
Ranking Session	* * * * * stars

List of all the menus of the app

Activity	
	This menu allows you to choose the type of activity you want to practice for your sessions. You can choose between skating, roller blading, scootering, biking

Wide Screen	
Display Disabled / Enabled	Enable or disable minimalist screen display
Time Delay Disabled / Enabled	Adds or deletes a display delay when the session is paused. When paused, the minimalist screen remains displayed for a few seconds, before fading out.
Auto Scroll Up Disabled / Enabled	Automatic scrolling of data assigned to the top field
Auto Scroll Down Disabled / Enabled	Automatic scrolling of data assigned to the bottom field
Top Field 2 Selected / 8	Select the data you wish to display in the upper field
Center Field Chrono	Select the data you wish to display in the central field: stopwatch, time, or alternating mode.
Bottom Field 3 Selected / 8	Select the data you wish to display in the lower field

Options

Back Color Black / White	Allows you to choose the background color, black or white
Auto Pause Disabled / Enabled	Enabled: f your speed drops below the value equal to 1 m/s (3.6 km/h), the session will automatically pause, and will resume in the same way when your speed returns above this threshold speed. Disabled: Session recording continues even if you stop
Main Screen Chrono	Data you wish to see displayed on the application's main screen, in the colored banner at the center of the screen. You can choose between the stopwatch, the hour, or an alternation between the two.
Speed Display Current Speed	Type of speed value you wish to display on screens where speed is shown. You can choose between current speed, average speed and maximum speed.
Mapping Disabled / Enabled	Displays (Enabled) or not (Disabled) the map screen, on models compatible with this feature
Constellation GPS only	Type of GPS constellation you wish to use
Units	Choice of units used in the application

Tools

Scores - View Global Statistics	Display several screens of statistical data on all your sessions
Scores **Reset Scores**	Allows you to reset your scores and statistical data
Scores **Assign Scores**	If you reinstall the application, this will prevent you from losing your previous statistics by re-entering them using this menu. To do this, be sure to copy these values regularly, so as to keep a regular record of them.

Tools - Others

Activation Code	Displays the application's ID number and allows you to enter your activation code. Once this has been entered and is valid, it cannot be changed.
App Version	Displays the app's version number and the date it was released to the Garmin store. This lets you know if your app is up to date with its latest version or not.