# **Datarun Premium**

## manual version 1.7

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## **Versions**



### **Main versions**

This manual covers the 4 main versions of Datarun premium, varying in number of metrics on screen from 4 to 7. It also covers the copy versions.

The location of the main versions in the Garmin app store:

- 4 metrics: https://apps.garmin.com/nl-NL/apps/76af5825-6594-4337-8a8e-82193a47ed12
- 5 metrics: https://apps.garmin.com/nl-NL/apps/a791fa75-714e-4679-9d8e-ffce09f8069e
- 6 metrics: https://apps.garmin.com/nl-NL/apps/665468ea-2f51-412b-be2f-9c1ea777901f
- 7 metrics: https://apps.garmin.com/nl-NL/apps/360a26c4-e2bb-45b7-8f97-2694ccf74eef#0

You need a license for each of these 4 main versions; see the last part of this manual.

### Copy versions

Per main version I have also made copy versions. If you have a license for a main version of Datarun premium with 4, 5, 6 or 7 metrics, you will be enabled to generate a license key for copy versions for that specific main version (see the last part of this manual). The advantage of having copy versions is that one can have more than one sets of setting. Also I have used the copy versions to deviate a bit in

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what functionality is available. This was needed because of a flaw in the Garmin ecosystem; although I have made the code modular and watches with 32 kB available for datafields don't use or see the extra code for the 128 kB-watches, the extra weight of the larger settings file is getting the memory of the 32 kB-watches overloaded. The 32 kB-watches are the FR645, FR735xt, FR935 and Fenix 5(s). The 128 kB-watches are the Fenix 5x and Fenix 5+ watches. The FR645 music has 64 kB available and isn't affected. The FR645 and fr645m however cannot connect to powermeters, what limits their options as well.

	FR645	FR735xt, FR935	FR645m	Fenix 5x and Fenix	
		and Fenix 5(s)		5+	
Main	Regular set of	Regular set of	All options,	All options, no	https://apps.garmin.com/en-
version	options, except	options, no	except power	power workouts	US/apps/360a26c4-e2bb-45b7-8f97-
	power options	power workouts	options		2694ccf74eef
Copy 1			All options, except power options	All options, including power workouts	https://apps.garmin.com/en- US/apps/cf749693-c944-42c5-b736- 1151a5818bd0
Copy 2	Regular set of options, except power options	Regular set of options, no power workouts	All options, except power options	All options, no power workouts	https://apps.garmin.com/en- US/apps/35a70116-037c-4d57-aef7- 209765ab5c52
Copy 3, not yet started		Limited set of options, including power workouts			Not yet available in the Garmin apps store

The naming convention of the different versions of Datarun premium, which you will see on the watch when selecting datafields for usage in an activity profile, are:

- 1. Datarun premium with 7 metrics, main version: Datarun pr7c0
- 2. Datarun premium with 7 metrics, copy version 1: Datarun pr7c1
- 3. Datarun premium with 4 metrics, main version: Datarun pr4c0
- 4. Datarun premium with 4 metrics, copy version 1: Datarun pr4c1

### Available metrics

The following metrics are supported:

Nr	Available metrics	FR645(m)	FR735xt, FR935, F5s, F5	F5x, F5s+, F5+, F5x+ D2C, D2D	Remarks  Blue texts means it is only available yet in the versions of Datarun premium with 7 metrics. Other main versions and copy versions will follow
	Timer metrics				
1	Timer	Х	Х	Х	Not all the field positions are possible for the versions with 5, 6 or 7 metrics, due to space limitations
2	Lap timer	Х	Х	Х	Not all the field positions are possible for the versions with 5, 6 or 7 metrics, due to space limitations

3	Last lap timer	X	Х	Х	Not all the field positions are possible for the versions with 5, 6 or 7 metrics, due to space limitations	
4	Average lap time	Х	Х	Х	Not all the field positions are possible for the versions with 5, 6 or 7 metrics, due to space limitations	
	Distance metrics					
5	Distance	Х	Х	Х		
6	Lap distance	Х	Х	Х		
7	Last lap distance	Х	Х	Х		
8	Average lap distance	Х	Х	Х	This gives the average distance of all laps	
	Pace metrics					
9	Current pace	Х	X	Х		
10	Pace averaged over the last 3 seconds	X	Х	Х		
11	Pace averaged over the last 5 seconds	Х	Х	Х		
12	Pace averaged over the last seconds		X	Х	A value between 5 and 300 can be chosen	
13	Pace in seconds	X (only		X	Useful for track training, but only in combination	
	per 100 meter	FR645m)			with a footpod like Stryd. With GPS unusable	
14	Lap pace	Х	Х	Х		
15	Last lap pace	Х	Х	Х		
16	Average pace	Х	Х	Х		
17	Cadence SPM	Х	Х	Х	In steps per minute	
	Speed metrics					
18	Current speed	Х	Х	Х		
19	Speed averaged over the last 3	X (only FR645m)		X		
	seconds					
20	Speed averaged	Х	Х	Х		
	over the last 5					
	seconds					
21	Speed averaged	X (only	Χ	Χ	A value between 5 and 300 can be chosen (it's the	
	over the last	FR645m)			same setting as for "Pace averaged over the last	
	seconds	<b>'</b>			seconds")	
22	Lap speed	Х	Х	Х		
23	Last lap speed	Х	Х	Х		
24	Average speed	Х	Χ	Х		
25	Cadence RPM	X (only FR645m)		X	In rotations per minute (is 50% of Cadence SPM), for those who are on their bikes a lot (3)	
	Heartrate metrics	1110-13111)			those who are on their pixes a lot 6	
26	Heartrate	X	X	Х		
27	HR-zone	X (only	^	X	Based on current heartrate	
21	TIN-ZUITE	FR645m)		^	based of current fleat trate	

28	Lap heartrate	Х	Х	Х	_0
29	Last lap heartrate	Х	Х	Х	<u> </u>
	Average	Х	Х	Х	
	heartrate				
30	Power metrics				
31	Running power		Х	Х	
32	Running power,			X	Temporary fix for misbehaving Fenix 5+ series
02	filtered for spikes			**	watches
	> 2000 Watt				
33	Power averaged		Х	Х	This metric is used for power alerts, colored fonts,
00	over the last 3		~	,,	vibration and, if wanted, a sound alert
	seconds				violation and, it wanted) a sound diene
34	Power averaged			Х	A value between 5 and 300 seconds can be chosen. If
J-	over the last			,	normalized power is chosen as a metric to display as
1	seconds				well, the number of seconds will be automatically
1	30001103				changed here to 30 seconds if you had chosen less
					then 30 seconds!
35	Lap power		Х	Х	then 30 seconds:
36	Last lap power		X	X	
37	Average power		X	X	
38	Normalized		^	X	See explanation of this metric further on. Value
30				^	becomes visible after 30 seconds in the activity
20	power			X	,
39	Powerzone			X	This is currently a 5 zone-based metric. The Palladino
					project 10 powerzones-system is supported (and
					that setting can also be used for a 7 powerzone-
	ETA metrics				system)
40					
40	Required pace to	Х	Χ	X	
	meet a certain				
	finish time				
41	Estimated time of	X (only		Х	Not all the field positions are possible for the
	arrival	FR645m)			versions with 5, 6 or 7 metrics, due to space
					limitations
42	Deviation in time	X (only		Х	Not all the field positions are possible for the
	from a set finish	FR645m)			versions with 5, 6 or 7 metrics, due to space
	time				limitations
	Performance				
42	indicator metrics			.,	Efficiency Index (EI) Const. I December 1
43	Current efficiency			Х	Efficiency Index (EI) = Speed/Power
	index				Speed, in meters per minute,
					divided by watts.
					An increase in value shows improved running
	1 CC: -:				efficiency; more meters per watt output
44	Lap efficiency			Х	
	index			_	
45	Last lap efficiency			Х	
	index				
46	Average			Х	
	efficiency index				

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## General options

Aside from these field-options, there are also some general options:

- you can force backlight to be on, after the activity has started, regardless of device settings. This is useful for winter eveningsessions
- For the FR645m, Fenix 5x, D2 Charlie/Delta and Fenix 5 plus series it is possible to set the background of the datafield to white or black, regardless of device settings
- the watch vibrates when the averaged power over 5 seconds is outside of the zone that is defined in the settings. In the settings one can set the time between each vibration and by pressing the start-stop-button quickly twice (within 1 second) one can switch on or off these

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alerts. Also, there is an option to let a "beep"-sound hear together with the vibration. The "beep"-sound power alert has a different sound for when one is below the desired zone or above it.

The fonts of the labels and power-related metrics turn red if you generate not enough power and turn purple if you use too much power (applicable for all watches).

Be sure to use the right format (7 characters in total) for the powerzone, as shown as an example in the settings in Garmin express/connect.

- For the FR645m, Fenix 5x, D2 Charlie/Delta and Fenix 5 plus series it is possible to change the clock to the number of laps, a clock with AM/PM time and some metrics (not the time- and powerrelated metrics).
- For the main version (not the copy versions) it is possible to set the background color, regardless watch settings. This option overrules the color inversion by the general Garmin option called autoclimb and the color inversion by Strava segments! Those color inversions don't work anymore within this datafield
- The heartrate zones are taken from your Garmin account settings. The label colors are however not the colors you see in Garmin connect. Also for cadence the label coloring is different, though the cadence zones are identical to what Garmin uses
- Pace and averaged pace can be round off to 5 seconds per mile/km (like 4:05 or 4:10)
- The battery becomes red if power gets below 15%.

# Remarks about the options



## Altitude, elevation gain and elevation loss

Elevation gain and loss are Garmin's internal values that the watch calculates itself and come in feet or meters depending on watch settings. Altitude is also in feet or meters depending on watch settings.

These are not exact metrics! Garmin uses GPS for some devices for determining altitude, which is definitely not precise, and a barometer. A barometer should be more precise, but in my experience it is still not very good. On a really flat surface I see 30 meters of vertical gain after 500 meters... Be sure to calibrate the barometer before you start a run (based on a known altitude); then you have at least some precision for the altitude. The setting where the GPS is used to calibrate the barometer at the start of an activity is the 2<sup>nd</sup> best option, is my conclusion based on discussions in the Garmin forums (I always try to calibrate manually).

A nice read about the "truth" of elevation-data is available at the Runalyze website: https://help.runalyze.com/en/latest/calculations/elevation.html

#### Race metrics

When you are in a race and striving for a certain finish time you need to be able to pace yourself. In In my experience in the last part of a race, especially a marathon, it becomes harder to calculate your estimated finish time or the pace required to meet a certain finish time. Therefore there are a few possible metrics to help:

- 5. estimated finish time (in hours, minutes and seconds)
- 6. deviation from required finish time (in minutes and seconds)
- 7. required pace to meet a certain finish time

Also the colors green and red on the labels above or under the metrics indicate whether you are within schedule, based on last lap pace or average pace, to be at the finish line at the required finish time (only for FR645m, Fenix 5x, D2 Charlie/Delta and Fenix 5 plus series).

Depending of your way of racing ("flat" with almost no split, or with a significant split), you can choose how the ETA-calculation is done; based on average pace of the pace of the last completed lap. I expect that "based on elapsed time of the last lap" will work best for most people

When for the calculation of the estimated finish time (ETA) and for the deviation the pace from the "last lap" is chosen, the values will be displayed after the first lap has been completed. If you have autolap enabled in your profile-setting (for 1 mile or 1 km for instance), it will be visible after the first mile or km. You can force it to update earlier by pressing the lap button and force a new lap.

When you have reached the required distance but choose to run on or haven't reached the finish line, the ETA-time reverts to zero if it's based on last lap pace. The required pace disappears from the screen. The "deviation" in time from the desired finish time stays alive however.

The distance of a race (for instance a marathon) can be entered alongside the desired finish time. The ETA will be calculated for that distance. This needs to be in meters, or thousands of a mile. **So for the marathon in thousands of a mile the value must be 26219!** 

Be sure to use the right format (8 characters in total) for the desired finish time.

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For a marathon it is best to give in a few hundred meters more than 42195 meters (or the equivalent in thousands of miles). In my experience my Garmin watches display around 42500 to 42600 meters when crossing the finish line. For a half marathon of 21095 meters, it is often 21250 to 21300 meters. Use those higher amounts for the distance in the settings!

### Pace coloring

As base for the pace coloring you can choose between average pace and the pace required for a certain finish time. When using average pace for coloring, the datafield observes the current deviation from the average pace until that moment. Pace coloring based on a certain finish time requires to have a certain finish time and distance be entered. When you just want to use a certain pace, like 6:00 per km, you can give 00:06:00 as required finish time and 1000 as the required distance.

The different colors show how much/little you deviate:

- light grey means -10% slower
- yellow between -5 and -10% slower
- blue between -5 and +5%
- green between +5% and +10% faster
- red more then +10% faster
- purple more then +15% faster

## Cadence coloring

This is only available for the FR645m, the Fenix 5x and the Fenix 5 plus series. The color scheme is based on ranges of steps/minute: 120-153=light grey, 153-164= yellow, 164-174=blue, 174-183= green, 183-300=red.

## Heartrate zone coloring

This is only available for the FR645m, the Fenix 5x and the Fenix 5 plus series. The Garmin color scheme is: zone1=grey, zone2=blue, zone3=green, zone4=orange, zone5=red. Although this range is logical for Garmin connect, from grey/blue to red based on the intensity of the run, it visually is less workable when running. The trouble is that it is very hard, while running in a high HR-zone, to discern a small orange label from a red one. I also have trouble with it. So I changed it to: zone1=light grey, zone2= yellow, zone3=blue, zone4= green, zone5=red, above zone5 is purple.

#### Running power

It is possible to choose power as metric. There are requirements though:

- 8. you need to have a Stryd footpod (Runscribe had beta firmware in August 2018, that works as well, but this capability seems to be removed again)
- 9. you need to have a watch that can connect the Stryd footpod as a powermeter (the triathlon watches that support bike power meters normally, like my Forerunner 935). The FR645 and FR645(m) don't support pairing of powermeters

(M)

10. you need to have de Stryd datafield active on a 2<sup>nd</sup> datafield-screen in order to get all the power and other metrics recorded into the fit file and synced to the Garmin website and the Stryd powercenter

Garmin power is not supported. Garmin choose not to implement native power or do a hack that supplies the Garmin power to the channel that receives power meter data.

#### **Powerzones**

The label colors show your power zone for that metric (only available for the Fenix 5x and the Fenix 5 plus series).

For a 5 zones-system it is:

zone1=light grey, zone2= yellow, zone3=blue, zone4= green, zone5=red, above zone5 is purple.

For a 10 zones-system (which you can use for a 7 zone-system as well) it is: under zone 1=light gray, zone1= dark grey, zone2=blue, zone3=green, zone4=dark-green, zone5=orange, zone6=red, zone7=dark red, zone8=pink, zone9=purple, zone10=black

For setting in the powerzones: here is an example from a 10 powerzone system, but for less zones it works the same:

033:Z1:215:Z2:248:Z3:267:Z4:290:Z5:314:Z6:337:Z7:347:Z8:386:Z9:498:Z10:660 for 10 zones.

I have highlighted the values in the table (thanks to the user Ewan Cameron for that):

Label	Zone number	Of 10	% of CP (lower)	% of CP (upper)	Power (lower)	Power (upper)	RACE TYPE
Recovery	1a	1	0.1	0.65	33	215	
Recovery	1b	2	0.651	0.75	<mark>215</mark>	248	
Recovery	1c	3	0.751	0.8	<mark>248</mark>	264	
Endurance	2	4	0.81	0.87	<mark>267</mark>	287	Ultra
Tempo	3a	5	0.88	0.94	290	310	Marathon
	3b	6	0.95	1.01	<mark>314</mark>	333	15k – HM
Threshold	4	7	1.02	1.05	337	347	10k
High intensity	5	8	1.05	1.16	347	383	5k
V02	6	9	1.17	1.5	<mark>386</mark>	495	1500m
Peak	7	10	1.51	2	498	660	Sprint

It is 033:Z1:267:Z2:310:Z3:337:Z4:347:Z5:386:Z6:498:Z7:660:Z8:997:Z9:998:Z10:999 for 7 zones!

## Normalized power



This is only available for the Fenix 5x and the Fenix 5 plus series. I included Normalized power as people kept asking for it, but wasn't sure what the use was during an activity. Coach Steve Palladino however explained it in a post the Stryd Facebook page:

Normalized power is a metric that was developed out of necessity for cycling power analysis and interpretation, because cycling power output can be quite variable. For example, in cycling, you can be in the group, coasting at times, soft pedaling at times, and really grinding at times. This type of ride would result in a highly variable power file, typically with a NP > than AP. In such instances, the Variability Index (the ratio of NP:AP) is >1.0. This is rather typical in most cycling. A Variability Index of 1.0 is typically only found in isopower interval/tempo training and in time trial racing. Runners do not coast. Maintaining pace is a primary driver in running. Consequently, in most running scenarios where a) running is on flat to rolling terrain, \*and\* b) the running is constant/uninterrupted, Variability Index = 1.0 or very very close to it. With a Variability Index = 1.0, NP = AP. IOW, in most running scenarios where running is on flat to rolling terrain, and the running is

However, in scenarios like trail racing, or in those like running with planned regular walk breaks, then it is possible that NP might be > AP. In these cases, race pacing and planning might be better done with NP as a global constraint, rather than AP.

In contrast, for a runner that otherwise does not trail race, or incorporate walking breaks into their racing/training, asking for NP just because it is available for cycling really has no purpose. For example, here are three recent marathon results:

11. AP 214, NP 214, VI 1.000

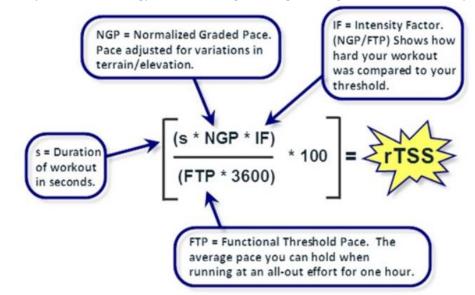
constant/uninterrupted, NP carries no added value over AP.

- 12. AP 277, NP 278, VI 1.004
- 13. AP 338, NP 338, VI 1.000

In contrast, in cycling it is not unusual to see VI > 1.10. Seeing NP on the watch, as mentioned, may serve a purpose in applications like trail racing and racing with planned or frequent walking breaks. (https://m.facebook.com/groups/1538096923155033?view=permalink&id=2012163545748366).

## Intensity Factor and Training stress score

See https://www.trainingpeaks.com/blog/running-training-stress-score-rtss-explained/



## Running Stress Score

Running Stress Score is a metric that Stryd uses as a variant of the training stress score: <a href="https://blog.stryd.com/2017/01/28/running-stress-score/">https://blog.stryd.com/2017/01/28/running-stress-score/</a>

There are some questions on how to find a value of the K described there, like explained here: http://www.georgeron.com/2017/08/an-equation-for-running-stress-score-rss.html

Allan Olesen mailed me about his search for K: "I couldn't find a value of K which would fit. It wouldn't fit my own runs, and it wouldn't fit the examples in the table in the article.

So I started messing with the factor of 100 in the article and discovered that I could make everything fit if I changed it to 108 instead. With this, combined with a value of K of 3.5, my own runs would fit, and all examples from the table in the article would fit, except two.

Of the two table values which didn't match, one was probably a typo - a value of 0.65 repeated in both columns. The other one was probably redacted on purpose because the article writer was hell-bent on making the result fit with his assumption of 100 RSS/hour when P = CP - which will never be possible if the assumed factor of 100 is in reality 108."

I have taken Allan's take on this, with his proposed formula: RSS per sample =  $108/3600 \times \text{sample}$  duration in seconds x (Power/CP)^3.5

#### Power to heartrate ratio

Power to heartrate ratio (P/HR) = Power/ Heartrate (Watts divided by beats per minute)
An increase in value shows increased endurance, see <a href="https://www.trainingpeaks.com/blog/how-to-use-aerobic-decoupling/">https://www.trainingpeaks.com/blog/how-to-use-aerobic-decoupling/</a> for some reading.

## Training effect

Training effect is a metric developed by Firstbeat and licensed by Garmin. On this page you can find more info and a whitepaper: <a href="https://www.firstbeat.com/en/science-and-physiology/epoc-and-training-effect/">https://www.firstbeat.com/en/science-and-physiology/epoc-and-training-effect/</a>

### *Lap pace and structured workouts*

Since the summer of 2018 lap pace and other lap related metrics are working for automated laps, produced by a structured workout step (thanks to the CIQ3-firmware update by Garmin). At the end of every workout step, Datarun premium resets the lap values it works with to display the metrics. Unfortunately that's not the case for the FR735xt, as it hasn't received the update to CIQ 3 firmware. Lap metrics aren't and won't ever be working for the FR735xt in a structured workout...

#### **Power workouts**

Currently in the standard Garmin structured workout option, it isn't possible to choose a power-based workout for running. In copy version 1 I created a solution for the Fenix 5x and Fenix 5+ watches and I hope to create a "poor men's version" in copy version 3 for the FR735xt, FR935 and Fenix 5[s] (and yes I also paid good money for my FR935 in 2019, but such is life ©).

I am using 3 options:

a structured workout created in the normal "Garmin way". With this one can display the
desired power zone at the beginning of a new workout step and alert if the performance is
too low or too high.





- Syntax, with power zones only: 100-190; 240-260; 100-190; 260-280; 100-190; 280-300; 100-190; 300-320; 100-190; 320-340; 3100-190; 00-320; 100-190; 280-300; 100-190; 260-280; 100-190; 100-150; 100-150; 100-190; 100-190
- 2. a workout made in Datarun premium, with warm-up, 8 repetitions and cooling. You will receive information about the new training step and an alert 10 seconds before the start of a new step for 5 seconds. At the start of a new workout step "Next step is displayed". During that step you will receive a warning when you leave the power zone. You can switch the alerts on/off in the settings or on the fly by quickly pressing the start-stop button. One can choose for vibrations only, or also a "beep-sound".
  Syntax with time and distance: 0300t100-190; 8x(0120d240-260; 0060t190-210); 0900t100-190
- 3. a training made in Datarun premium, with 18 steps. It works the same as option 2 Syntax with time and distance: 0300t100-190; 0800d240-260; 0100d100-190; 0800d260-280; 0100d100-190; 0800d280-300; 0100d100-190; 0800d300-320; 0100d100-190; 0800d320-340; 0100d100-190; 0800d300-320; 0100d100-190; 0800d260-280; 0100d100-190; 0300t100-190

It's very important to follow this syntax; the datafield will for example crash if it encounters a semicolon while expecting a value. I will create a spreadsheet where one can simply create a string with the right syntax. It will be available shortly at <a href="https://vermail.nl/datarun-premium-power-workout-sheet">https://vermail.nl/datarun-premium-power-workout-sheet</a>

If all steps are done, the watch shows "The end" at the end of the last step.

# Installing and using the datafield



Installing is through Garmin Express (PC/Mac) or Garmin Connect (mobile app). Personally I prefer Garmin Express, as Garmin Connect sometimes doesn't transfer the selected options to the watch or just doesn't work as expected.

Setup on the watch itself: you have to select the running activity and then long press the middle button on the left side (for the 5-button devices). Then a menu opens where you can change the settings of the running activity. You can select the first datafield and change to one single field (this datafield fills the whole screen). Then you must change the contents of that single field, again using the menu. You have to choose the IQ option , then you can choose Datarun premium. See for a video for Fenix 5 (and most other watches):

https://m.youtube.com/watch?v=P5HYBabeB2s&feature=youtu.be

Don't forget to specify the options you want in the settings, otherwise you get the default settings that I have specified. You can change the settings through the Garmin connect app, but for some people that doesn't work. Connecting to a PC and using Garmin express always works for changing the settings.

# Ordering a license

The costs of a license or licenses:

- the license key for first version of Datarun premium requires a payment of 4 euro; this can be for the current versions of 4, 5, 6 or 7 metrics
- if you have paid for a version of Datarun premium (for instance the version with 7 metrics), but want to use another version as well (the one with 4 metrics for example), then you pay 2 euro and I calculate the license key for that version

A few persons have asked about bundle prices:

- licenses for all 4 versions with 4, 5, 6 and 7 metrics: 8 euro
- licenses for all 3 versions: 7 euro

If you have paid already for one license, then you can subtract 4 euro from the above prices. Be so kind not to use PayPal protection, as you know by now you don't need it and PayPal charges 0,50 euro for it.

You can get a license by sending € .... to <a href="https://paypal.me/JoopVerdoorn">https://paypal.me/JoopVerdoorn</a>. If you want to do a payment via bank transfer send me a message (use the contact developer option on app description page in the app store). You need to give in the 3 ID's you see on the "License needed" screen, otherwise I can't calculate your license key. Within 24 hours I will send a key to the email-address of the Paypal-account.

The license is only for the device of which you have given me the ID's!

You can use the setting "Show demo field for ID's and check license" in Garmin Express/Connect to get the ID's shown directly. Then you don't have to wait for 15 minutes of activity before the "License needed" screen comes up.



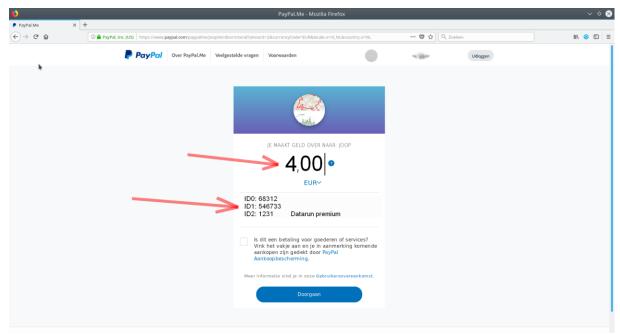


When you are ready to order a license, you can use the setting "Show demo field for ID's and check license" in Garmin Express/Garmin Connect to get the ID's shown directly.

The other option is to start an activity and wait for 15 minutes of activity before the "License needed" screen comes up.

In the PayPal payment, mention the 3 ID's and that it is for the Datarun premium datafield:





Within 24 hours I will send a license to the emailaddress of the Paypal-account.

The license must also be given in in the settings through Garmin Express/Garmin Connect (preferably Garmin Express on the PC/Mac). You can check whether the watch recognizes the license, by using the "Show demo field for ID's and check license" setting again.

# Creating a license key for a copy version

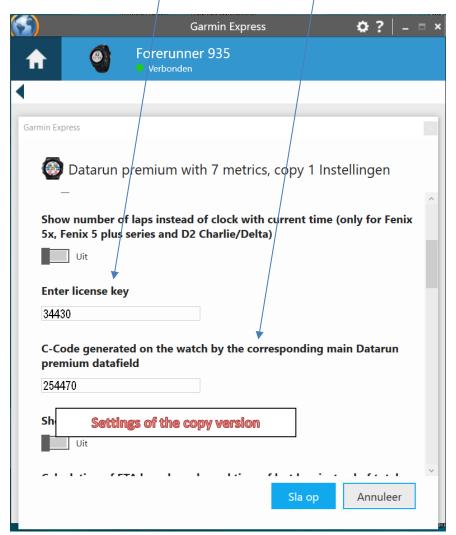
Use at least version 1.51 or later of the main and copy datafields, otherwise it won't work!

When you have a license key for the main version of Datarun premium, you can generate a license key for a copy version. You can generate a key for a copy version with the same amount of metrics; a license of the copy version with 5 metrics can be created by the main version with 5 metrics. You have to switch the setting "Show demo view for ID's and check license" on for the main datafield (not the copy version!); then you will see the following screen on your watch if you start an activity with the main version (not the copy version!).





The C-Code is the code you need; write it down. This code you must put into the settings of the copy version, under "C-Code generated on the watch by the corresponding main <u>Datarun</u> premium <u>datafield</u>". As license key under "Enter license key" you need to give in the license key that you already have for the main version of Datarun premium. Also switch the setting "Show demo view for ID's and check license" on for the copy version.

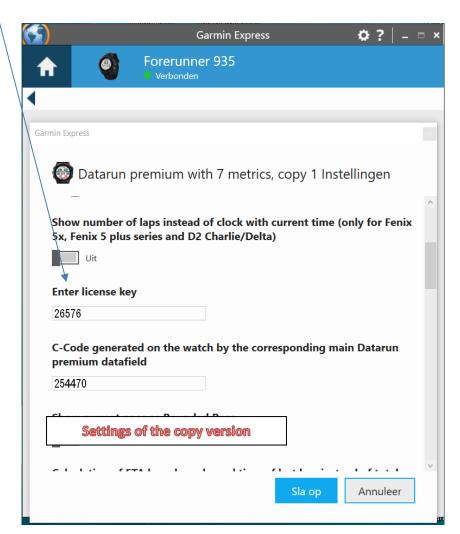




Then start an activity with the copy version. It will show a license code and a C-Code.

Write down your license code and store it safely; that will be the license key for this copy datafield for this watch.

Put this license key in the settings of the copy version under "Enter license key", replacing therefore the license key of the main version of Datarun premium. You let the C-code be for what it is.



The last step is to switch the setting "Show demo view for ID's and check license" off for both the main and copy version, so you can use them normally with activities. Do this generating process preferably on the day that the C-Code is created, as the C-Code can change over time!

If you don't want to bother with this process of generating a license key etc, you can get a license for this copy version if you have a license for the main version. You can then send € 2.00 to https://paypal.me/JoopVerdoorn, if you want to do a payment via bank transfer send me a message (use the contact developer option on this page). You need to give in the 3 ID's you see on the "License needed" screen, otherwise I can't calculate your license key. PLEASE submit the ID's required for calculating the license key when sending money (see the last part of the manual on how to get the ID's)!