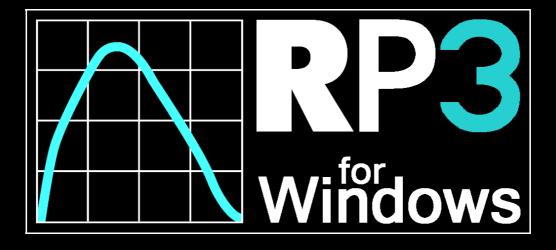
RP3W : ROWPERFECT3 for Windows



developed in cooperation with CARE RP3 BV, The Netherlands by Row-Ware, The Netherlands

Manual 1.1.3.1 rev 1 - September 2012

Contact information

CARE RP3 BV

contactJan LammersaddressWegtersweg 51-53postcode7556 BPcityHENGELO OVcountryThe Netherlandswebsitewww.row-perfect.nl

ROWPERFECT3 agents

Rekers Rowperfect (RP3 Europe, UK excluded)

contact Marjolein Rekers

- contact Joost Middelkoop
- website <u>www.rekersrowperfect.nl</u>
- email rowperfect@home.nl

ROWPERFECT UK Limited

- contact Rebecca Caroe
- contact David Hudson
- website <u>www.rowperfect.co.uk</u>
- email info@rowperfect.co.uk

RP3 USA & CANADA

- contact Carlos Dinares
- website <u>www.rowperfect3.com</u>
- email carlos@rowperfect3.com

Software development

Row-Ware contact Justus Janssen country Netherlands website <u>www.row-ware.com</u> email info@row-ware.com

Copyright & disclaimer

The software RP3W : ROWPERFECT3 for Windows and this manual are © 2010-2012 Row-Ware, The Netherlands.

This software is provided 'as-is', without any express or implied warranty. In no event will the author be held liable for any damages arising from the use of this software.

The revision - see cover page - of this document supersedes any previous revision.



1 About this manual

This is the manual for *ROWPERFECT3 for Windows* (or *RP3W* for short). *RP3W* is the MS Windows based version of the original Rowperfect CARE/DOS software and requires an RP3 USB Interface to record data. It runs on all MS Windows versions currently available, including - but not limited to - MS Windows XP, Vista and 7.

With *RP3W* one can record training sessions with over 25 parameters per stroke, including a force-length curve and close to actual on-water splits. This data can then be saved and analysed.

In the next chapters the *installation*, the basic functions *recording* and *analysing* and some advanced features such as *User files* and *Program options* will be explained.

2 Install the hard- and software

To record data, the computer need to be connected to the RP3 USB Interface. This small piece of electronics is built-in in every ROWPERFECT3 rowing simulator, but can also be added to a Rowperfect Classic. In any case, the interface requires so called *Drivers* to be installed for the computer to communicate with the device. When *RP3W* is used for analysis only, these drivers are not necessary. This chapter describes the installation of the hard- and software for *RP3W*.

2.1 Drivers

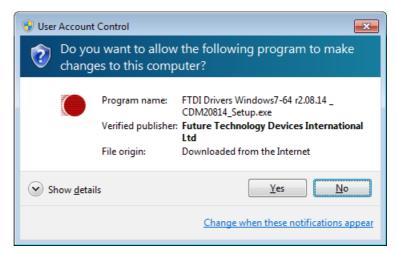
When *RP3W* is to be used for recording data, read on. Else, this paragraph can be skipped.

Note : Install the drivers prior to connecting the RP3 USB Interface for the first time to the computer. In any case, make sure the RP3 USB Interface is not connected to the computer when installing the drivers.

To install the drivers, obtain the latest version by downloading the file specific for your MS Windows version from <u>www.row-ware.com/rp3usb</u> and run the programme.

Depending on MS Windows version and settings, a warning might be issued asking for special permission to install software from "Future Technology Devices International Ltd" (or FTDI Ltd). Accept this dialogue and the drivers will be installed.

Again, depending on MS Windows version, your computer might need to be restarted. Follow any instructions from the driver installer.

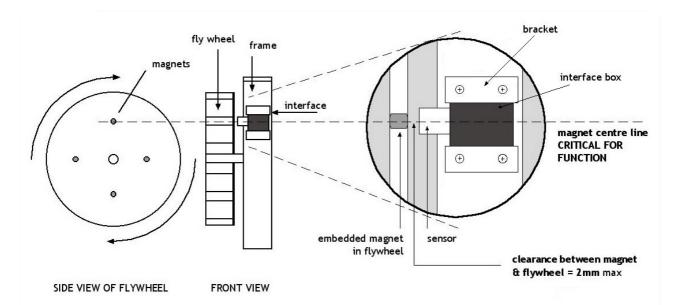


2.2 RP3 USB Interface on a Rowperfect Classic

The RP3 USB Interface is pre-assembled on the ROWPERFECT3 Rowing Simulator by default, in which case this paragraph can be skipped. The interface can, however, also be mounted on the Rowperfect Classic, following the instructions below:

The RP3 USB Interface is a small black plastic box (62x43x25 mm) with a small cylinder protruding from it (the sensor). The sensor is sensitive towards magnetic fields. Its active spot is very small, and is situated in the centre of the extremity of the sensor. For proper functioning of the interface it is essential that the active spot of the sensor is positioned on exactly the same circle as the magnets in the flywheel that activate the sensor. The distance between sensor and flywheel should be between 1 and 2 mm. The interface comes with two mounting brackets. To correctly place the sensor and interface into the right position proceed as follows (if you are aligning the sensor for the first time it may help to lay the rowing simulator gently on its flywheel side, which makes it easier to see the magnets in the flywheel) :

Unscrew the screws in both brackets until flush with the inside of the bracket. Hook the two brackets with their bent rims pointing towards each other, under the lower rims of the main frame. Take the interface, put it with the sensor side pointing towards the flywheel and to the



main shaft, and insert the interface between the two brackets. Pushing both brackets firmly around the interface, slide the interface into position such that the magnets pass directly under the centre of the sensor.

Make sure the distance between the top of the sensor and the flywheel surface is between 1 and 2 mm, and the interface body is parallel to the flywheel. Then tighten gently the four screws to fix the brackets, and thus the interface, in the proper position.

The photo, taken from the front, shows a properly mounted RP3 USB Interface on a Rowperfect Classic, connected to both a USB cable (white) and a Polar receiver cable (black).

2.3 Connect to the computer

To connect the RP3 USB Interface to the computer, use



the USB cable provided by plugging in the A connector into a free USB port on the computer, and the B connector into the left side of the ROWPERFECT3 or the RP3 USB Interface.



Note : Ensure the orientation of the B connector is correct (and not upside-down).

troubleshooting paragraph. If all goes well, you can start your workout straight away, as described in chapter 3 : Record a training session.

2.4 Polar receiver

To record heart rate data, a Polar receiver can be plugged-in into the RP3 USB Interface. The Polar receiver is a little black box (usually 50x35x20 mm) and has an RJ10 connector at the end of the 1.5m cable. This connector fits in the socket next to the USB-B cable. Place the black box near the seat, for example under it, using Velcron adhesives, in such a way the cable is pointing towards the flywheel. The Polar receiver will operate in combination with a Polar T31, T61 or Wearlink chest strap (coded and non-coded types).

2.5 RP3W

To install *RP3W* for the first time on a computer, obtain the latest version by downloading it from www.row-ware.com/rp3w . RP3W is distributed as an installation programme with the name *rp3wNNNN.exe* where *NNNN* denotes the version number. Download the file, and run it.

The Installation Wizard will guide you through the set-up process. Using default settings, it will place a short-cut to RP3W on your desktop. After the installation is complete, the installation programme can be removed from your computer.

To install an update, close *RP3W* if it is running and then follow the same steps. The installation programme will overwrite the existing installation; programme options and previously recorded training sessions will remain in tact.

To ease updating an existing installation of *RP3W*, you can also select the *Update...* item in the Help menu.

2.6 Test installation

When both the driver and RP3W have been installed, the set-up should be tested to verify all is well. To test the set-up, follow these steps:

- Connect the RP3 USB Interface to the computer. _
- Start *RP3W* by double-clicking the *RP3W* icon on the Desktop. _
- Click OK, or press [Enter], in the New row window dialogue to accept the default values.
- Click Connect, or press [Space], in the lower left-hand corner of the Row window.
- Click Search in the Connect dialogue and wait for RP3W to find the RP3 USB Interface, or select one from the drop-down list manually (any item except "DEMO") .
- Click *Test* to start receiving data from the interface.
 - When the interface is found, there should be a beeping sound approximately once every second and a spinning symbol visible in the dialogue.
- Make one stroke on the ROWPERFECT3 / Rowperfect Classic.
 - The beeping as well as the spinning should speed up en then slow down again, until it reaches the regular interval of once every second.
- Click the Stop button to stop the test.

If anything during these steps goes different than described above, please refer to the





rp3w1126.exe



2.7 Troubleshoot connection problems

Connection problems between *RP3W* and the RP3 USB Interface can occur as a result of a wide variety of causes, each with a specific approach to fix it. As a whole, the set-up consists of the following parts:

- RP3 USB Interface sensor
- RP3 USB Interface circuit board
- USB Cable
- Driver software on the computer
- RP3W software on the computer

The next steps describe a systematic approach to track down any possible cause of the malfunction, referring to this list when needed.

Step 1. Initial test in the Connect dialogue.

When RP3W is started and the Connect dialogue is showing, does the *Source* drop down list an entry saying "COMx" (where x is a number between 1 and 255 inclusive)? If not, go to step 2. If there is an entry, go to step 5.

Step 2. There is a problem with the computer recognising the RP3 USB Interface.

- The first thing to check is the easiest: are both ends of the cable properly plugged-in into both the computer and the RP3 USB Interface. If not, see to it. Close *RP3W* and go to step 1.
- Is the USB cable visually damaged? Replace it with another one. Do you have any other USB device with the same USB B socket (e.g. a printer, modem, USB hub or docking station) that is working properly, then temporarily use that USB cable with the RP3 USB Interface. Close *RP3W* and repeat step 1.
- Open Device Manager in MS Windows (through Control Panel or Administrative Tools, depending on MS Windows version) and locate a "Ports" section. If it's not there, go to step 3. If it is, open it and locate an item named "USB Serial Port". If there's no such line, go to step 3, else go to step 4.
- Step 3. The RP3 USB Interface is not recognised by MS Windows at all.
 - Un-plug the RP3 USB Interface from the computer and install the proper drivers as described in 2.1 : Drivers. When done, go back to step 1.
- Step 4. The RP3 USB Interface is not properly recognised by MS Windows.
 - Download and run the RP3List utility found on <u>www.row-ware.com/rp3usb</u> and follow the instructions in the corresponding manual.
- Step 5. The RP3 USB Interface is recognised, but not responding properly.
 - Click the *Test* button in the *Connect* dialogue and wait for 5 seconds. Then click the same button again, now captioned *Stop*. Was there a beeping sound and/or a spinning symbol in the dialogue, every second? If not, go to step 4. If there was, go to step 6.

Step 6. The sensor data is not coming through.

- The sensor is most probably badly aligned or too far away to pick up the magnets in the flywheel. Contact your ROWPERFECT3 agent to assist in getting the sensor aligned properly.
- The RP3 USB Interface sensor or circuit board is broken. Contact your ROWPERFECT3 agent for repair or replacement.

3 **Record a training session**

This chapter describes the primary function for *RP3W*, recording a training session. Before you can start a session, make sure the following preparations are done:

- The computer is connected to the RP3 USB Interface
- The drivers are installed
- *RP3W* is installed and working

All these steps are described in the previous chapter 2 : Install the hard- and software. The next paragraphs assume *RP3W* has been installed with all default options.

3.1 Start RP3W

To start *RP3W*, double-click the short-cut on the Desktop or select the item in the *ROWPERFECT3 for Windows* group in the Start menu, located at the lower left-hand side of your computer screen. *RP3W* will display a welcome screen displaying the current version. When the programme is started for the first time, a dialogue will be presented displaying a short guideline.

3.2 *New row window* dialogue

When the Welcome screen has disappeared, the *New row window* dialogue is presented. Here you can enter personal information for the rower or select a pre-defined *User File* using the *Open*... button. More on User Files can be found in chapter 5 : User files.

Click the *OK* button, or press the [Enter] key alternatively, to accept the dialogue and continue to the *Row* window.

New row win	dow
<u>T</u> itle	Ronald-2K
<u>N</u> ame	Ronald
<u>W</u> eight	69 Kgs
<u>G</u> ender	Male 🔹
<u>B</u> oat	1X -
<u>S</u> procket	Big right 🔹
0 <u>p</u> en	OK X Cancel

3.3 *Row* window

The main window for recording a training session is called the *Row* window. This window consists of four major areas:

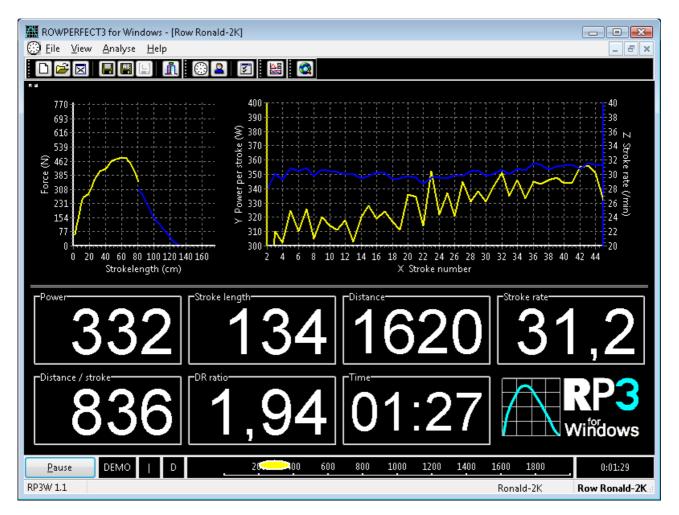
- the Menu bar and Tool bar on top,
- the Force curve chart in top left-hand corner,
- the Stroke data chart in the top right-hand corner,
- the *Data area* at the bottom of the window, containing 8 cells, each containing either a parameter value or the RP3 logo.

All these areas can be configured by right-clicking on them, as explained in the next paragraphs. The size of the areas can be changed by dragging the *splitter* line up/down.



The tool bar contains short cuts to almost all items in the menu bar. Hovering the mouse over one will display the corresponding keyboard short cut, if any.

To start defining the training session limits, skip to paragraph 3.4 : Training session settings now; to start rowing straight away, skip to paragraph 3.5 : Start rowing.



3.3.1 *Row* window : Force curve chart

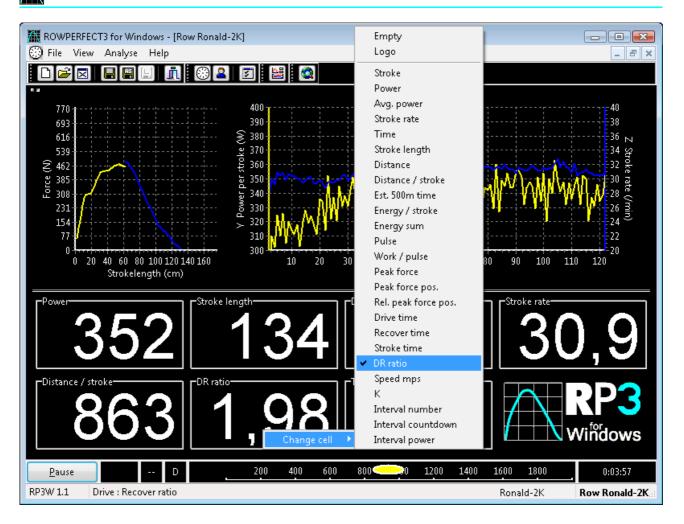
This chart in the upper left-hand side of the *Row* window displays the the force-length curve of the current stroke, the previous stroke and - optionally - a reference curve. Which curves are to be displayed can be set using the pop-up-menu available by right-clicking the chart.

3.3.2 *Row* window : Stroke data chart

This chart in the upper right-hand side of the *Row* window displays three individually selectable parameters as a history chart. Common use is having the X-axis (the one at the bottom) display one of parameters that increase during a session, for example *Stroke number*, *Distance* or *Time*. Which parameters are to be displayed can be set using the pop-up-menu available by right-clicking the chart. In addition to the standard extended set of stroke parameters recorded for each stroke (see 3.3.4 : Row window : Stroke parameters), an axis can be set to "Empty". Axis scaling for any axis is done automatically.

3.3.3 *Row* window : Data area

The 8 cells at the bottom of the *Row* window are called parameter cells. Each of these cells can be set to display any of the parameters that are recorded for each stroke (see 3.3.4 : Row window : Stroke parameters), by right-clicking on them. An example of this is shown in the image below, where the contents of the 6th cell is set to *Drive* : *Recover* ratio. A parameter cell can also be set to display nothing ("Empty") or to display the ROWPERFECT3 logo.



Which cell is displaying what parameter is stored in the programmes configuration automatically and re-used for the next training session.

3.3.4 Row window : Stroke parameters

In addition to the force curve, *RP3W* records 25 parameters for each and every stroke; these are stored for analysis and they can be displayed in the *Row* window when recording a training session. The table below lists all stroke parameters and explains what they mean. Any of these parameters can be set to be displayed in the parameter cells in the *Row* window and in the Stroke data charts in the *Row* and *Session* window.

#	Pop-up-name	Long name	Unit	Description
1	Stroke	Stroke number		The current stroke number
2	Power	Power per stroke	W	The power applied during this stroke
3	Avg. power	Average power per stroke	W	The average power per stroke, calculated over the entire training session
4	Stroke rate	Stroke rate	/min	The rate of the numbers of stroke per minute
5	Time	Time	S	The time since the beginning of the training session

6	Stroke length	Stroke length	cm	The length during which force was applied to the handle (the length of the drive)
7	Distance	Distance	m	The virtual distance covered since the beginning of the training session
8	Distance per stroke	Distance / stroke	cm	The virtual distance covered during the stroke
9	Estimated 500m time	Est. 500m time	S	The estimated virtual 500m time when the entire session is done the current power output
10	Energy per stroke	Energy / stroke	J	The energy put into the system during the stroke
11	Energy sum	Energy sum	kJ	The total amount of energy put into the system since the beginning of the training session
12	Pulse	Pulse	/min	The heart rate (requires a Polar heart rate receiver and chest strap)
13	Work / pulse	Work per pulse	J/beat	The energy supplied by the body, for each heart beat; this is an indicator for body fitness
14	Peak force	Peak force	N	The highest force measured for the stroke
15	Peak force pos.	Peak force position	cm	The position during the drive where the peak force was measured
16	Rel. peak force pos.	Peak force position relative to stroke length	%	The position of the peak force position relative to the length of the stroke
17	Drive time	Drive time	S	The time for the drive
18	Recover time	Recover time	s	The time for the recover
19	Stroke time	Stroke time	S	The time for the stroke (drive + recover)
20	DR ratio	Drive : Recover ratio		The time of the drive relative to the time of the recover
21	Speed mps	Boat speed in m per s	m/s	The virtual speed of the boat
22	К	K value		The resistance factor (drag factor)
23	Interval number	Interval number		The interval number
24	Interval countdown	Interval countdown		The interval countdown limit
25	Interval power	Interval power	W	The average power for the interval

Parameter cells displaying either *Stroke*, *Time*, *Distance*, *Energy sum* or *Interval* are counted backwards when the session limit is set to the corresponding limit type (e.g. when a training session is set to be 2000m, the *Distance* parameter cell will start with 2000 and display values from 2000, 1999, 1998 down to 3, 2, 1, 0).

3.3.5 Row window : Screen saver

When *RP3W* is running, the MS Windows screen saver and power saver features are temporarily blocked. This to prevent the screen from going blank whilst recording a training session.

3.4 Training session settings

By default, a training session is defined as a "unlimited" session defined by "distance". This means it will count up in "meters" starting from "0". To change this, click the *Training* button (
a) on the tool bar, select the *Training*... item from the *View* menu or press [Ctrl] + [T] alternatively.

In the *Training* window, two types of information can be entered: data that either does or does not have an impact on how force curves, stroke data and session results are calculated.

3.4.1 Training session : Workout page

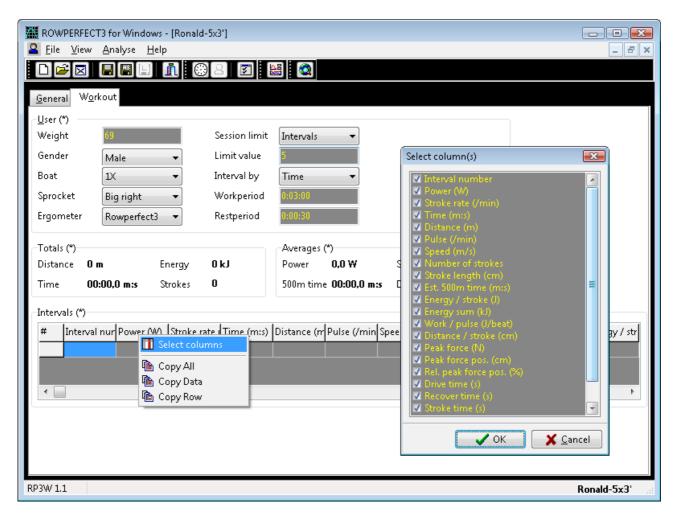
The first group is available on the Workout page. Set all fields according to this type of workout. Session limits are always based on (only) one magnitude (Strokes, Energy, Distance, Time or Intervals) and can not be mixed. When a session limit is set to non-zero, the corresponding parameter cell in the *Row* window will count down towards zero, to display the remaining amount of Strokes/Energy/Distance/Time/Intervals.

Note : Changing workout settings for an existing training session will re-set the recorded data. To prevent this from happening accidentally, a confirmation dialogue will be presented when doing so.

ROWPERFEC	:T3 for Windows - [Ronal	d-2K]			- • •
🚨 <u>F</u> ile <u>V</u> iew	<u>A</u> nalyse <u>H</u> elp				_ 8 ×
		32 🛛			
<u>G</u> eneral W <u>o</u>	rkout				
<u>U</u> ser (*)					
Weight	69	Session limit	Distance 🔹		
Gender	Male 👻	Limit value	2000		
Boat	1X -				
Sprocket	Big right 🔹				
Ergometer	Rowperfect3 🔹			<u>R</u> eset	
	\sim	$\sim\sim$	$\sim\sim\sim$	$\sim\sim\sim\sim$	$\sim\sim\sim\sim$

Intervals are configured by three extra settings: the interval magnitude (Strokes, Energy, Distance or Time), a *Work period* and a *Rest period*.

When a training session is set to be limited by intervals, the Workout page also shows a matrix were average values for each interval will be stored. By right-clicking on this matrix, the columns can be set. Data shown can easily be copied to the clipboard and then be pasted in, for example, MS Excel.



3.4.2 Training session : General page

The second group of data that can be entered are labels describing the training session with a name, title, description etcetera. Data entered in these fields can be changed even after a training session has been recorded. This information is used to identify the training session when analysing it on screen and it can be used for automatically naming files (see 6.2 : Auto save for more details).

	T3 for Windows - [Ronald-2K]		
A <u>File V</u> iew	<u>A</u> nalyse <u>H</u> elp		_ 8 ×
🗅 🖻 🖂			
<u>G</u> eneral W <u>o</u> r	rkout		
Training			
File	ronald-2k.stg		
Date / Time	26-1-2012 13:47:29 Size 181151 by	ytes Type Training (STG)	
- <u>R</u> ecording -	Ronald-2K	-	
Title		Type 2K 🗸	
Name	Ronald	Event WT-2012 🔻	
Description	•		
Date / Time	26- 1-2012 💷 🕇 13:17:42	RP3 Interface @ RP3W 1.1	
_Note		Chart	
	ng 2012 - Go for it!	Options	
RP3W 1.1			Ronald-2K

3.5 Start rowing

When all three areas of the *Row* window are properly configured and training session details are set, the (rowing) action can begin.

3.5.1 Rowing : Connect

In the *Row* window, click the *Connect* button in the lower left-hand corner of the window, or press [Space] alternatively. This will bring up the Connection dialogue. The *Source* pop-up will display the last used COM-port, if available. RP3W defaults to "DEMO" when the previously used port is not available. In that case, either use the built-in demo or click the *Search* button to have *RP3w* locate an interface for you, or select one manually. In case of any doubt about the selected source, click the *Test* button to verify it is sending data. When the required source has been set, click the *OK* button, or press [Enter] alternatively, to close the dialogue and start recording data.

At this point, the system is ready to record your training session.

3.5.2 Rowing : Record data

While rowing, all three areas of the window are updated for each stroke made:

- The chart on the left will display the force curve of the current and previous stroke, and optionally a reference curve. More on this in one of the next paragraphs. These curves can be switched off using the pop-up menu when right-clicking the chart.
- The chart on the right displays the values for up to three parameters, using the X-axis (horizontal, bottom), Y-axis (vertical, left) and Z-axis (vertical, right). These axes can be configured using the pop-up menu when right-clicking the chart.
- The data area at the bottom of the window displays the 8 parameter cells. All these cells can be set to display either different parameters, the *RP3W* logo or just a blank box.

3.5.3 Rowing : Pause / End session

When the session limit (Strokes, Energy, Distance, Time or Intervals) was set to a non-zero value, the training session will end when the limit has been reached. To pause/interrupt a training session, click the *Pause* button or press [Space]. This will set the system to "Paused", making it deaf for data from the interface. To continue the training session, click *No* and then the *Continue* button (or press [Space]). To end the training session before the session limit has been reached, choose *Yes* in the confirmation dialogue. This will end the session, displaying the *Results* dialogue.

3.5.4 Rowing : View results

The *Results* dialogue displays the totals, averages and maxima for the recorded training session. These values are visible on the *Workout* page in the *Training* window too.

3.5.5 Rowing : Save data

When the *Results* dialogue has been closed, then training session can be saved by clicking the *Save as* button (E) on the tool bar, selecting the *Save as...* item in the *File* menu or by pressing [Ctrl]+[Alt]+[S]. To add (or change) the name,

title or description of the session, edit the *General* page in the *Training* window. To switch to this window, click the *Training* button (\geqq) on the tool bar, select the *Training*... item from the *View* menu or press [Ctrl]+[T] alternatively. If the training session has already been stored, saving changes can be done through the *Save* button (\blacksquare) on the tool bar, the *Save* item in the *File* menu or by pressing [Ctrl]+[S].

3.5.6 Rowing : Set reference curve

When recording a training session, the current and previous force curve are shown for each stroke made. To assist in understanding and/or improving the use of the force curve, a reference curve can be drawn too. This reference curve can be one provided by the coach, taken from a website or one recorded (by yourself) in a previous session.

To set a reference curve in the *Row* window, follow the steps below:

- Start *RP3W* and click Cancel in the New row window dialogue.
- Click the Open button () on the tool bar, select the Open... item from the File menu or press [Ctrl]+[O] alternatively and open a "Stroke file (*.str)".
- Optionally, change the colour of this reference curve on the General page using the *Options...* button.

Results for Ronald-2K	
Totals	
Total distance	2000 m
Total time	07:36,3 m:s
Total energy	155 kJ
Total strokes	238
Averages	
Avg. power	340,5 W
Avg. 500m time	01:54,0 m:s
Avg. Stroke rate	31,3 /min
DR ratio	1,92
Maxima	
Avg. power	363 W
Avg. 500m time	01:24,9 m:s
Avg. Stroke rate	32,8 /min
DR ratio	2,12
	🗸 ок

- Start a new training session, by clicking the *Row* button ((()) on the tool bar, selecting the *Row*... item in the *View* menu or by pressing [Ctrl]+[R] alternatively.

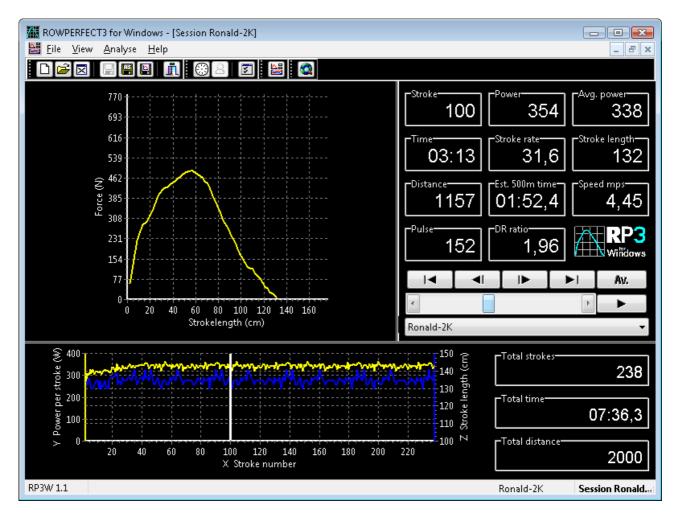
From here on, follow the same steps as when doing a normal workout (e.g. open a User file or enter session data manually), as described in paragraph 3.2 : New row window dialogue.

4 **Review a session**

When a training session has been recorded and stored as a Training file, the next step is to analyse the data. This is done in the *Session* window.

Before you can use the *Session* window, make sure a Training session is loaded. Either because it has just been recorded, or a "Training file (*.stg)" has been loaded using the *Open* button (*E*) on the tool bar, the *Open*... item in the *File* menu or by pressing [Ctrl]+[O].

To open the Session window, click the Session button (B) on the tool bar or select the Session... item in the Analyse menu.



4.1 *Session* window

The main window for analysing a training session is called the *Session* window. This window consists of four major areas:

- the Force curve chart in top left-hand corner,
- the *Stroke data area* in the top right-hand corner, containing twelve cells, each displaying either a parameter value or the RP3 logo,
- the Stroke data chart in the lower left-hand corner,
- the Session data area in the lower right-hand corner, containing three cells, each displaying a parameter value.

All these areas - except the force curve chart - can be configured by right-clicking on them, as explained in the next paragraphs. The size of the areas can be changed by dragging the *splitter* lines left/right or up/down.

4.1.1 Session window : Force curve chart

This chart displays the force curve for the current stroke. To zoom-in on the chart, draw a selection rectangle from top-left to bottom-right holding down the left mouse button. To re-set the chart, draw one from bottom-right to top-left.

4.1.2 Session window : Stroke data area

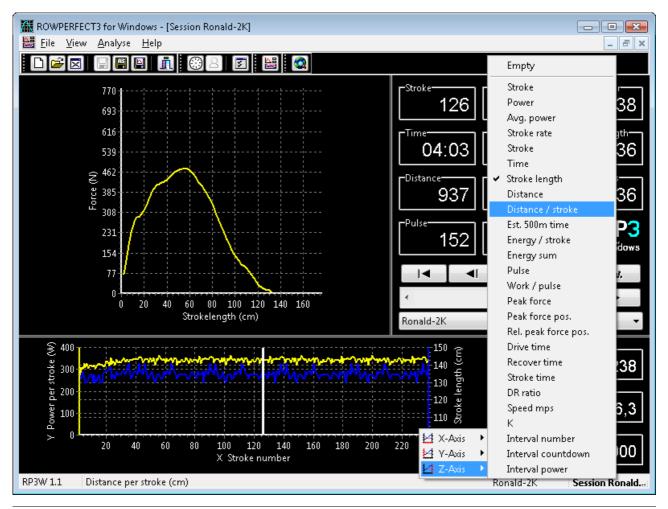
The twelve parameter cells display a selection of all the parameters that are recorded for each stroke. The contents of a cell can be changed by right-clicking on it; either to display a parameter, the ROWPERFECT3 logo or nothing at all.

Below the stroke parameter cells are the controls to select the training session to be analysed as well as to browse through the selected training session. You'll find a set of VCR style buttons for *First, Previous, Next* and *Last,* as well as a *Play* button to animate the strokes. The scrollbar can be used to slide up and down through the strokes, and gives a visual feedback of the number of strokes in the entire session.

The Av. button will display the average force curve for this session.

4.1.3 Session window : Stroke data chart

The *Stroke data* chart displays up to three stroke data parameters, comparable to the one in the *Row* windows (see 3.3.2 : Row window : Stroke data chart). All three axes can be configured by right-clicking on the chart. When browsing through the strokes, a vertical bar indicates the position of the stroke currently being displayed. Axis scaling for any axis is done automatically.



4.1.4 Session window : Session data area

The *Session* data area holds three parameter cells displaying the overall training session results, such as Time, Distance or Average power. The contents of the cells can be changed by picking any of the values from the right-click pop-up menu.

4.2 Advanced options

The *Session* window is all about re-viewing a training session in an interactive way. Besides this, it is also the starting point for some more advanced features.

4.2.1 Advanced : Create a reference curve

Reference curves are stored as *Stroke files*. To create such a stroke file from a previously recorded session, follow the steps below:

- Start RP3W and click Cancel, or press [Escape], in the New row window dialogue.
- Click the *Open* button () on the tool bar, select the *Open*... item from the *File* menu or press [Ctrl]+[O] alternatively and open a "Training file (*.stg)".
- Open the Session window by selecting the Session... item in Analyse menu (or by clicking the Session button (😫) on the tool bar).
- Browse through the strokes/force curves of the session. When a suitable force curve is found, click the Save as button () on the tool bar, select the Save as... item from the File menu, or press [Ctrl]+[Alt]+[S] to save the force curve currently being displayed as a Stroke file.

4.2.2 Advanced : Save the session window

To share the results of a training session with others or to print graphs, the entire Session window contents can be saved as an image file (a "Windows Bitmap file (*.bmp)"). This image can be viewed on any computer, imaging tool or office suite. To save the Session window, click the Save Chart button () on the tool bar or select the Save Chart... item from the File menu alternatively. It will show a dialogue prompting for a file name and path to store the image.

5 User files

A training session file consists roughly of two parts:

- User data (e.g. name, title, description) and Workout settings (e.g. weight, boat type, limit distance/time/strokes)
- Recorded data (e.g. force curves, stroke data, interval data, session results)

All this data is stored in one single file when a training session is saved.

The first part contains all information entered manually on the *General* and *Workout* pages of the *Training* window and can be re-used, when stored as a User file. Doing so, you can build your own library of workout settings, and choose one when starting a workout (see 3.2 : New row window dialogue).

5.1 Create a User file

To create a *User file*, follow these steps:

- Start RP3W.
- In the New row window dialogue, click the Cancel button or press [Escape].
- Click the New button (D) on the tool bar, select the New... item in the File menu or press [Ctrl] + [N] alternatively. This will open a new Training window and open its Workout page.
- Enter training session data in the User group such as Weight, Gender and Boat type.
- Switch to the *General* page, and enter training session data in the *Recording* group (and add a note or set the colour under *Chart / Options...* if needed).
- Save the file using a descriptive name (e.g. wu_10min.stg for "Warming up, 10 minutes", or sprint_5x500m.stg for an interval session of "5 x 500m sprint").

Note : Only enter data in a User file that is not likely to change. When creating User files for a crew, you can save one with details for name and weight for each rower for each type of workout. You can also save just files per workout type, and enter the name and weight in the *New row window* dialogue, after selecting the User file.

5.2 Edit a User file

To edit an existing user file, open it in *RP3W* by clicking the *Open* button (\searrow) on the tool bar, selecting the *Open*... item in the *File* menu or by pressing [Ctrl]+[O] alternatively. Then, edit the fields as desired. When done, click the *Save* button (\square) on the tool bar, select the *Save* item in the *File* menu or press [Ctrl]+[S] alternatively to save the changes in the original *User file*. When editing an existing file, you can also save it under a different file name by using the *Save as* button (\square) on the tool bar, the *Save as*... item in the *File* menu or the [Ctrl]+[Alt]+[S] keyboard short cut.

5.3 Use a User file

When *RP3W* has just been started, the *New row window* dialogue is shown by default. Here you can enter user data manually or select a pre-defined User file, as described in the previous paragraphs. You can also do <u>both</u>:

- First, select the User file using the *Open*... button. When done, enter (or, perhaps better put, *replace*) the user name, title, weight and/or boat type.
- Then, click the OK button to accept the settings and continue to the Row window.

Another way of using *User files*, is to cancel the *New row window* dialogue and open a User file manually. To do so, click the *Open* button (🚔) on the tool bar, select the *Open*... item in the

File menu or press [Ctrl]+[O] alternatively. This will open the *Training* window with the User file already loaded. Here you can edit the general and/or Workout pages in order to either save the User file (see 5.2 : Edit a User file) or start using it for a new training session by clicking the *Row* button ((()) on the tool bar, selecting the *Row*... item in the *View* menu or by pressing [Ctrl]+[R] alternatively. A dialogue will be shown to confirm the action. If this dialogue is cancelled, the standard *New row window* dialogue is shown.

5.4 Advanced options

When running *RP3W* for the first time, it will assume some default User file settings, such as a name "Anyone" with a weight of 80 kilograms. These defaults can be changed by creating a User file with the name RP3W.STG, stored in the program data folder, which resides in the *Row-Ware* RP3W sub-folder of the (*My*) *Documents* folder. The actual location of this folder depends on the MS Windows version (and sometimes also on MS Windows settings). The defaults for the most used MS Windows versions are listed below:

MS Windows version	Default RP3W programme data
MS Windows XP	C:\Documents and Settings\ <i>{username}</i> \My documents\Row- Ware\RP3W
MS Windows Vista, MS Windows 7	C:\Users\{username}\Documents\Row-Ware\RP3W

Where {username} is the MS Windows log-on user name.

Note : Previous versions of *RP3W* stored the programme data in the folder *RP3W* itself was installed in (default C:\Program files\ROWPERFECT3 for Windows\). *RP3W* will move files from this location to the new one automatically, if needed.

6 **Programme options**

Several options of *RP3W* can be set through the *Options* dialogue. To open this dialogue, click the *Options* button (2) on the tool bar or select the *Options*... item in the *View* menu menu alternatively. This dialogue has two tab pages, which are described in detail in the next paragraphs.

6.1 Appearance

On the *Appearance* page, several colours and the application font can be set. The preview area on the right displays the results of the new settings when applied by closing the dialogue with the *OK* button.

RP3W uses one over-all font. To change the font name and style, click the *Label...* button. This button also sets the colour for all the labels in the programme. The other three buttons set the colour for text in window/edit areas and the background colours for dialogues and window/edit areas.

Note : setting the font to a very large size can disturb the layout of some windows. Common values for font size are in the range of 8 to 12.

Options	Options
Appearance Auto save	Appearance Auto save
Default Preview Label on dialog Text in window : The quick brown for jumps over a lazy dog 0123456789 Image: Iext Image: Iext Image: Dialog OK	 ✓ Auto save training sessions ✓ Increment names Automatically save training sessions to the following path and name ✓ Usemme\Documents\Row-Ware\RP3W\{title}_{date}_{time}, stg The following codes can be used for automatic saving: {date}, {time}, {title}, {name}, {description}, {event} and {type} Autoclose after rowing ④ Do not ④ Close RP3W ④ Shutdown computer (Windows 2000 and up only)
✓ OK Kancel	✓ OK <u>X</u> Cancel

6.2 Auto save

To store recorded training session files in a pre-set, though flexible, location on your computer automatically, enable the *Auto save* feature. With this option, files are stored in a folder-hierarchy that will be generated by *RP3W* based on information from the training session (e.g. the date of the recording) and that can be customised to organise the data in a logical way.

6.2.1 Auto save : codes

File and (sub-)folder names can be created using codes from the table below. All codes refer to and can be changed on the *General* page in the *Training* window (see 5 : User files).

Code	Description
{date}	The date of the recording, in YYYYMMDD (Year-Month-Day) format, e.g. August 15, 2009 = "20090815"
{time}	The time of the recording, in HHMMSS (Hour:Minute:Second) format,

	e.g. 5:23:12 PM = "172312"
{title}	The title of the training session
{name}	The name of the training session
{description}	The description of the training session
{event}	The event of the training session
{type}	The type of the training session

Codes can be used and mixed in any combination. When saving the session file, *RP3W* will built a path and file name by replacing the codes in the auto save path with actual data from the training session. If a code does not result in any data, it will stay as it is and not be replaced. Folders are created automatically if needed.

6.2.2 Auto save : examples

Some examples of using the auto save option are in the table below.

Auto save option	Could result in
C:\RPDATA\{name}\	C:\RPDATA\John\JohnK_20090815_17231
{title}_{date}_{time}.stg	2.stg
C:\RPDATA\{date}\{description}-	C:\RPDATA\20090815\{description}-
{time}.stg	172312.stg
C:\Users\John\Documents\ROWPERFECT3	C:\Users\John\Documents\ROWPERFECT3
\{event}\{date}\{title}_{time}.stg	\WU\20090815\JohnK_172312.stg
D:\Documents and	D:\Documents and
Settings\John\Documents\RP-{date}\	Settings\John\Documents\RP-
{description}-{time}.stg	20090815\Warming up-172312.stg

In example 2, no "Description" information was available.

Note : It is advised to add the {date} and {time} codes as a minimum, to prevent (or minimise) duplicate file names.

7 Introducing SEAN : Session Analysis

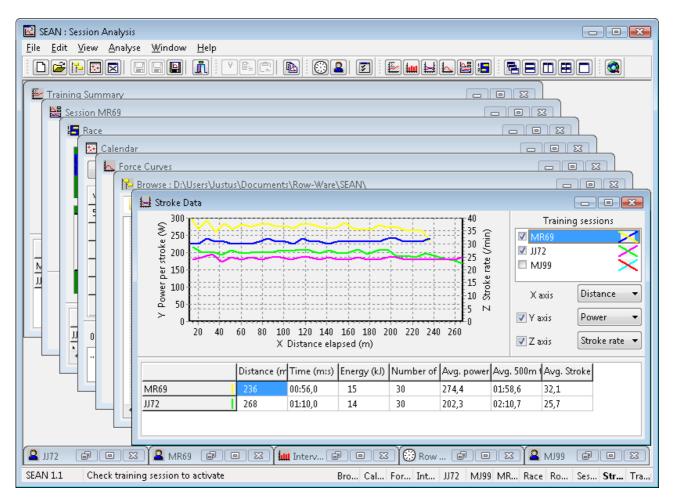
As *RP3W* is primarily intended for recording rowing sessions, it only has limited features for analysing sessions. To get the most out of your data, *SEAN* : *Session Analysis* can be used. This is a separate programme that can be considered the "Pro" version of *RP3W*. The most prominent differences are found in the huge amount of detail and features it has as it comes to reviewing sessions, as well as in the extensive options to tailor the programme to your personal preferences and requirements.

Examples of the first are:

- Extra analysis windows (session overview, intervals, stroke data, force curves, splits)
- Stroke data and force curve export (XLS and TXT format)
- Organise session files with a special browser and calender

Examples of the second are:

- Add an unlimited number of parameter cells and charts to the *Row* window
- Pre-define and re-use parameter cell layouts in the *Row* window
- Set axis scaling for all charts



SEAN is available through Row-Ware, see <u>www.row-ware.com/sean</u> for details.

8 Table of contents

1 About this manual	
2 Install the hard- and software	4
2.1 Drivers	4
2.2 RP3 USB Interface on a Rowperfect Classic	4
2.3 Connect to the computer	5
2.4 Polar receiver	6
2.5 RP3W	6
2.6 Test installation	6
2.7 Troubleshoot connection problems	7
3 Record a training session	8
3.1 Start RP3W	8
3.2 New row window dialogue	8
3.3 Row window	8
3.3.1 Row window : Force curve chart	
3.3.2 Row window : Stroke data chart	9
3.3.3 Row window : Data area	9
3.3.4 Row window : Stroke parameters	.10
3.3.5 Row window : Screen saver	.12
3.4 Training session settings	.12
3.4.1 Training session : Workout page	.12
3.4.2 Training session : General page	.14
3.5 Start rowing	.14
3.5.1 Rowing : Connect	.14
3.5.2 Rowing : Record data	.15
3.5.3 Rowing : Pause / End session	.15
3.5.4 Rowing : View results	.15
3.5.5 Rowing : Save data	.15
3.5.6 Rowing : Set reference curve	.15
4 Review a session	.17
4.1 Session window	.17
4.1.1 Session window : Force curve chart	.18
4.1.2 Session window : Stroke data area	.18
4.1.3 Session window : Stroke data chart	.18
4.1.4 Session window : Session data area	.19
4.2 Advanced options	.19
4.2.1 Advanced : Create a reference curve	.19
4.2.2 Advanced : Save the session window	.19
5 User files	.20
5.1 Create a User file	.20
5.2 Edit a User file	.20
5.3 Use a User file	.20
5.4 Advanced options	.21
6 Programme options	.22
6.1 Appearance	.22
6.2 Auto save	.22
6.2.1 Auto save : codes	.22
6.2.2 Auto save : examples	.23
7 Introducing SEAN : Session Analysis	.24
8 Table of contents	.25



Notes

L	

Owner information

Owner name :

ROWPERFECT3 / RP3 USB Interface	
purchase date :	

ROWPERFECT3 agent :

ROWPERFECT3 Serial number :

RP3 USB Interface Serial number :

RP3 Wireless Interface Serial number :