

The illustrated guide to

Training with RowPro Home Edition

Version 4

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1. Getting the results you want

WHAT RESULTS DO YOU WANT FROM YOUR ROWING?

By far the most common reason people row on Concept2 Indoor Rowers is to maintain or improve fitness and health.

The big question everyone faces at the start is "What rowing do I need to do, to get the results I want?" And soon after that comes the realization that "I really need a plan."

DIFFERENT APPROACHES TO TRAINING PLANS

When you're considering basing your rowing on a training plan, there are several ways you can go. Here's an at-a-glance comparison of the main options:

Option	Benefits	But
1. No plan You settle on a pattern of workouts you want to do without using a training plan created by a professional.	 You're 100% in control of the rowing you do – you choose. You can just do the workouts you like best. 	 You're likely to plateau quickly and not improve much further. You're likely to be doing more work and getting less benefit. It can be harder to stay motivated over the long term.
2. Ready-made plan You get a plan out of a book or by downloading it. The plan is ready-made, i.e. it is not tailored to you.	 Likely to be free and readily available. In principle better than rowing without a plan. 	 It's hard to find the right plan to fit your training intentions. The plan is not tailored to you so is likely to be sub- optimal. You need to set up workouts manually on the Concept2 PM.

Option	Benefits	But
3. Personal plan You get a training plan from a coach or personal trainer. The plan is tailored to you.	 The plan is tailored to you so is likely to be optimal. You're likely to be doing less work and getting more benefit. 	 You're likely to need to pay a substantial fee for each plan. You need to put in a lot of time and effort to get each plan. You need to set up workouts manually on the Concept2 PM
1. RowPro plan You get a plan by using the RowPro Training Plan Wizard. The plan is tailored to you.	 The plan is tailored to you so is likely to be optimal. You're likely to be doing less work and getting more benefit. RowPro sets up the workouts automatically on the Concept2. You get a lifetime supply of training plans for less than the cost of a single personal plan from a trainer. 	 You need to pay for RowPro. You need to put in a little time and effort to get each plan.

WHAT TO LOOK FOR IN A TRAINING PLAN

Training plans are not all born equal. But how do you spot a good training plan that will really help you get the results you want?

The first step is to make sure the plan meets the five core requirements:

- 1. Specific to rowing on a Concept2 Indoor Rower
- 2. Specific to your training goals (e.g. weight control, fitness or competition)
- 3. Specific to your experience level (beginner to elite)
- 4. Tailored to your age, weight and fitness level

5. Fits your annual calendar and weekly schedule

The next step is to make sure the plan is technically sound, meaning it is based on exercise science. Look for the four tell-tale signs:

- 1. Manageable weekly volumes (total meters or minutes)
- 2. Multi-day cycles of directed effort, easy rowing and rest
- 3. Multi-week cycles of strength, endurance and speed workouts
- 4. Workouts based on heart rate and stroke rate targets, not pace targets

Effective and safe training plans are based on exercise science and are prepared by experts. And unless a plan is specifically tailored to your physiological characteristics, it is almost certain to be sub-optimal and may not be safe for you.

THE ROWPRO TRAINING SYSTEM

Because finding a training plan that's right for you can be quite a challenge, Digital Rowing has built a comprehensive training system into RowPro.

Digital Rowing has engaged training guru Jon Ackland of Performance Lab International to create a training system specifically for users of Concept2 Indoor Rowers: The RowPro Training System.

The result is a huge library of hundreds of training plan templates for weight control, fitness and competition, suitable for the full spectrum of users from beginner to elite, plus a state-of-the-art Training Plan Wizard to select a suitable plan and expertly tailor it to your current age, weight, fitness level, rowing experience and training purpose.

Each training plan has been reviewed and fine-tuned by Olympic Rowing Coach Brian Hawthorne to make sure it's optimized for people rowing on Concept2 Indoor Rowers.

RowPro is engineered to use these training plans directly. RowPro sets up each training session onto your Concept2 Performance Monitor ready for you to row, and then records all your results directly from the Performance Monitor into your personal rowing log built into RowPro. Later, you can review any training session to see how you did, and compare that to other similar training sessions to see how you're progressing towards your goals.

RowPro plans have been carefully designed to meet all the core requirements, and are 100% based on exercise science, so you can be confident each plan is right for you.

By bringing all this together into an integrated easy-to-use training system, RowPro plans take the guesswork out of your rowing and put you in control, so you can be confident you'll get the outcomes you want from your rowing.

HOW ROWPRO TAILORS YOUR TRAINING PLAN TO YOU

If you went to a personal coach or trainer to get a plan from, here's what they'd do:

- Ask lots of questions about you: your physical state, your exercise, rowing and medical history, and your training intentions, timeline and goals.
- Possibly test you to measure your fitness and/or exercise response.
- Go off and create a training plan that fits you and your rowing goals, based on your input, and using their standard templates based on exercise science.
- Explain your plan to you and help you get started.
- Once you're underway, depending on your deal they might also:
- Monitor and assess your progress.
- Collect and analyze your results.
- Give you feedback and if necessary adjust your plan.

The RowPro Training System does all of this and more. RowPro:

- Uses the Training Plan Wizard to collect all the info it needs about you.
- Creates a training plan for you based on the choices you've made (purpose, duration, focus, level) in the Training Plan Wizard, together with Jon's training plan templates that are fully based on exercise science and reviewed by Olympic Rowing Coach Brian Hawthorne.
- Tailors the training plan to you based on your physical parameters (age, gender, height and weight), your training history, and for competition plans your racing history, that you enter in your RowPro User Profile and confirm in the Wizard.
- Sets targets for each training session based on heart rate and stroke rate so the plan automatically adjusts the intensity to match your current level of fitness.

The result is a training plan closely fitted to you and your training purpose. You would otherwise only be able to get such a plan by going to a personal trainer or coach with expertise in rowing and getting them to create a training plan specifically for you.

Once you start using your training plan, RowPro:

- Shows you the currently scheduled training sessions and lets you time-shift them a few days either way to fit them into the other activities in your life.
- Sets up each training session directly onto your Concept2 Performance Monitor.
- Automatically collects your results and provides you with analysis tools so you can easily track your progress.

So if you don't have a personal coach or trainer to guide your rowing, it's more or less certain that following a RowPro training plan will get you the results you want far better than just rowing your own sequence of favorite workouts.

Also, when you row with a RowPro plan, you get some other very important benefits:

- Your focus changes from "will I row today" to "what am I scheduled to row today?" This simple and powerful mind-shift helps keep you rowing.
- The exercise science foundation ensures you get the right timing and mix of strength, endurance and speed workouts to deliver the results you want.
- The workout variety improves your motivation and avoids the boredom and muscle 'plateau' of doing the same workout over and over again.

THE EXPERTS BEHIND ROWPRO TRAINING PLANS

Jon Ackland, director of specialist training company Performance Lab and creator of the RowPro Training System, is a true guru when it comes to training. He has over 20 years' experience in helping people achieve their fitness and performance goals.

A former rowing national champion and international Ironman triathlete, Jon has a deep level of personal understanding about what's needed to achieve your rowing goals.

Jon is the author of nine books on sports performance, including the best-selling books "Power to Perform" and "The Complete Guide to Endurance Training".

Jon has used his winning formulas and his considerable experience in delivering training 'without a trainer present' to create the RowPro Training System for all kinds of people from beginners to elite athletes who row on Concept2 Indoor Rowers.

Brian Hawthorne, rowing coach extraordinaire, is the man who 'trained' the 3D Oarsman in RowPro to row with excellent stroke technique.

A former Olympic Rowing Coach, Brian has a vast understanding of everything from the correct stroke technique to the most effective training patterns and workloads.

Brian has used his coaching experience to review and adjust the RowPro training plans to make sure they are fully effective in delivering the required results.

Brian also provides coaching on excellent stroke technique in the RowPro 3D Coaching Clinic. His easy-to-follow technique advice is effective for both beginners and athletes.

CORE TRAINING CONCEPTS

Your training will go better and make more sense once you understand the following core training concepts:

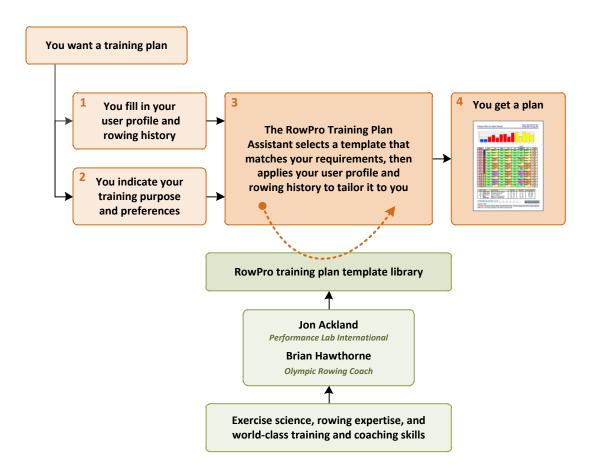
- **Performance components** The three main components of your ability to perform work (rowing) are your Endurance, Strength and Speed. Training seeks to improve your ability in each of these three components.
- **Exercise adaptation** When you train, you push your body beyond its current Endurance, Strength or Speed ability, and that triggers an exercise adaptation.

- Work and rest Your body doesn't adapt to exercise while you are exercising; it adapts afterwards when you are resting. The proper spacing of work and rest is core to making progress.
- **Cycles** Multi-day cycles of work and rest, and multi-week cycles of easy and hard, are both key ingredients in the work/rest patterns for effective training.
- **Ramp up and down** When you train effectively, your Endurance, Strength and Speed gradually ramp up, and when you stop training for extended periods, your Endurance, Strength and Speed gradually ramp down.
- **Diversity** If you repetitively do the same workout, you will quickly reach a plateau and not progress much further. To continue to develop your Endurance, Strength and Speed, you need to cycle through workouts that stimulate each one in a series of overlapping cycles.

2. Steps to get a training plan

AT-A-GLANCE DIAGRAM

The diagram below shows at-a-glance how you get a RowPro training plan:



How you get a RowPro training plan

The sections below provide a step-by-step guide for using the RowPro Training Plan Wizard to get a training plan.

OPEN THE TRAINING PLAN WIZARD

Open Control Center | Training Plans and click Use Wizard to Create Training Plan.

STEP 1: CONFIRM YOUR USER PROFILE SETTINGS

Just make sure the info in your profile is correct and click Next.

Training Plan Wizard	- · · · · ·	×
Confirm your User Pr	ofile settings	Step 1
Please confirm that the details below a applied to your User Profile when the N	are correct and update them if necessary. A Wizard finishes.	any changes you make here will be
Date of Birth	29/09/1971	
Gender:	○ Male ● Female	
Weight	59 🛬 ⊙ kg 🔿 lbs	
Height:	162 🛓 💿 cm 🔿 in	
Please take care - your traini provide.	ng plan depends on the accurac	y of the information you
Previous Next		Cancel
rievious Nexi		Cancer

STEP 2: CHOOSE THE SIZE OF YOUR PLAN

There are two choices here – how the plan fits your training, and the number of weeks.

Training Plan Wizard	0.01	×		
How will this plan fit into your training program? Step 2 of 8				
Choose the option that best describes	how this training plan will fit into your overall training pr	ogram.		
Full	Choose this if indoor rowing is your main training activity and you want the full benefit.			
Short	Select this if you specifically want shorter than normal training workouts.			
Segment	Select this if your indoor rowing is only one segment of a broader training program.			
How many weel	ks should your Plan last?			
Plan Duration	14 weeks 💌			
Previous Next		Cancel		

The role of this plan in your training program

Your first option is how extensive you want this training plan to be. Is rowing your main activity or just one segment of a broader training program? Your choices are:

- **Full** Choose this if rowing is your main activity and you want the fullest training outcome from this plan.
- **Short** Some of the Full plans contain long workouts. If you want to limit the duration of individual rows to 20 minutes max, choose the Short option.
- **Segment** Select this option if your rowing is only one segment of a broader training program. This limits the size of the workouts more than the Short option.

The duration of your training plan

You have a choice about how many weeks your training plan covers. If you choose more weeks you will get a more complete result, however if you need to for example fit a school semester or tie into a race date then you can choose a shorter plan. Your choices are:

- **14 weeks** This is the recommended plan duration. The first 2 weeks are Technique weeks and you can skip those if you wish to make this a 12-week plan.
- 12 weeks This is a slightly compressed timeframe but still gives a fairly complete result.
- **10 weeks** This is a more compressed timeframe. Us this duration if you need to fit a semester or other such time restriction.
- 8 weeks This is the shortest plan available. It does not give as complete a result as the longer plans but is a useful gap-filler or if you need to fit a race date.

Once you've made your choices, click Next.

STEP 3: SET YOUR TRAINING PURPOSE

This is a key choice that drives the rest of the Training Plan Wizard.

Training Plan Wizard		- B 13	×
What is your to	raining purpose?	Ste	ep 3 of 8
Click the button that bes	t describes your reason for training.		
Com	Training for competitive regattas or the on-line	e performance in rowing ranking	
Fit	Non-competitive trainin or off-season maintena	ng for fitness, cross-training Ince	
Weigh	Training that's focused weight	I mainly on controlling body	
Previous	lext		Cancel

Your training purpose

Your choices are:

- **Weight control** Choose this if the result you want most is to lose weight or control your weight.
- **Fitness** Choose this if your main intention is to get fit or stay fit. Also choose this for off-season maintenance or cross-training from another activity.
- **Competition** Choose this if your main intention is to maximize your speed for peak racing performance.

Note: Although any given RowPro training plan has one of these three training purposes as its primary focus, in practice that same plan will also provide considerable benefit for the other two training purposes that are not the specific focus of that plan.

So if you feel you have more than one of these training purposes, pick the one you feel most strongly about and make that your focus, and let the others come along for the ride.

STEP 4: OUTLINE YOUR TRAINING / RACING HISTORY

This is where you describe your training history. For competition plans there is an additional step after this where you describe your racing history.

Describe your training histor	/	S	tep 4 of 8
Rowing			
Years of active rowing:	15		
Training			
Main training sport:	Indoor rowing	•	
	Ever	Last 12 Months	
Longest workout:	150 🌲 mins	140 🚔 mins	
Most training per week:	15 🌲 hrs	12 🚔 hrs	
Most training per month:	50 🚖 hrs	40 ≑ hrs	
Please take care - your training plan de provide. Previous Next	pends on the ac	curacy of the informa	tion you Cancel

Your training history

If you have a rowing log you might want to use it to review your rowing history. The Wizard needs to know separately about what you've been doing in the last 12 months and what you've ever done.

Note if you haven't been rowing but have a significant history in another activity or sport, use the history related to that instead.

Read the items on this form carefully and take a bit of time to get them as accurate as you can. If you have no log, just use your best recollection. But <u>do not exaggerate!</u>

STEP 5: SET YOUR TRAINING FOCUS

For fitness plans, this is where you say if you want to go harder or easier. For competition plans you indicate what distance the plan should use as the focus.

Training Plan Wizard	0	x
What is your fitness	focus?	Step 5 of 8
Cardio	Advanced fitness or maintenance	
Tone Up	Beginner fitness or lite maintenance	
Previous Next		Cancel

Your fitness focus (Fitness plans)

RowPro training plans for fitness are available in more and less intense versions:

- Cardio For advanced fitness or maintenance.
- Tone up For beginner fitness, lite maintenance or recovery.

Your distance focus (Competition plans)

RowPro training plans for competition are optimized for the race distance, so for completion plans you need to indicate what race distance you are training for:

- Marathon Optimized for marathon races.
- Very long Optimized for half marathon, 60 min and 10,000m races.
- Long Optimized for 30 min races.
- Medium long Optimized for 5,000m and 6,000m races.
- Medium Optimized for 2000m races.
- Short Optimized for 500m and 1,000m races.

STEP 6: CHOOSE YOUR TRAINING LEVEL

Now the Wizard is ready to offer you a selection of levels you can row at.

Training Plan Wizard	2	×
What level do you w	ish to row at?	Step 6 of 8
The Wizard has cleared you for trainin the levels to suit your training intention	ng at the levels indicated with a green check mark ns.	below. Choose one of
Very Fit	Peak week up to 3 hrs 30 min total rowing. Individual workouts up to 90 min.	
Fit	Peak week up to 2hrs 50 min total rowing. Individual workouts up to 75 min.	√
Moderately	Peak week up to 2 hrs 15 min total rowing. Individual workouts up to 60 min.	_ √
Casual	Peak week up to 2 hrs 10 min total rowing. Individual workouts up to 50 min.	_ √
Beginner	Peak week up to 2 hrs 0 min total rowing. Individual workouts up to 40 min.	
Previous Next		Cancel

Guide to training levels

At this point the Training Plan Wizard uses your personal profile and your rowing and competition background to determine the levels of training challenge appropriate for you.

The Wizard takes into account many factors in your personal profile and rowing history when assessing the highest training level you are cleared to use. The Wizard uses slightly different assessment schemes for Weight, Fitness and Competition plans.

Within the levels the Training Plan Wizard clears you to row, you can choose whether to go for the highest level you are cleared to row or you can choose a level further down.

The main difference between the levels is the volume of rowing you will do each week - the higher the level the greater the volume you will row and the more substantial the training result will be.

The following profiles will give you a good idea of the 'typical' rower for each level:

Typical rower for each Weight plan level

- **Burn baby burn** Rowed workouts > 30 min, Rowed 3 hrs / wk and 12 hrs / mth, been rowing 4 yrs.
- **Moderate burn** Rowed workouts > 20 min, Rowed 3 hrs / wk and 12 hrs / mth, been rowing 2 yrs.
- Light burn Rowed workouts > 10 min, Rowed 1 hr / wk and 5 hrs / mth, been rowing 2 yrs.

• Beginner - Never rowed before on-water or indoors.

Typical rower for each Fitness plan level

- Very fit Rowed workouts > 40 min, Rowed 5 hrs / wk and 18 hrs / mth, been rowing 6 yrs, BMI < 24 (male) or < 22 (female).
- Fit Rowed workouts > 30 min, Rowed 3 hrs / wk and 12 hrs / mth, been rowing 4 yrs, BMI < 26 (male) or < 25 (female).
- **Moderately fit** Rowed workouts > 20 min, Rowed 3 hrs / wk and 12 hrs / mth, been rowing 2 yrs, BMI < 28 (male) or < 27 (female).
- **Casual** Rowed workouts > 10 min, Rowed 1 hr / wk and 5 hrs / mth, been rowing 2 yrs.
- Beginner Never rowed before on-water or indoors.

Typical rower for each Competition plan level

- **Elite** Rowed workouts > 60 min, Rowed 16 hrs / wk and 40 hrs / mth, been rowing 6 yrs, Raced 7x over 5 yrs and placed in the top 10, BMI < 24 (male) or < 22 (female).
- **Competitive** Rowed workouts > 60 min, Rowed 5 hrs / wk and 20 hrs / mth, been rowing 6 yrs, Raced 7x over 5 yrs and placed in the top 10, BMI < 24 (male) or < 22 (female).
- **Semi-competitive** Rowed workouts > 30 min, Rowed 5 hrs / wk and 20 hrs / mth, been rowing 2 yrs, Raced 3x over 3 yrs and placed in the top 50%, BMI < 26 (male) or < 25 (female).
- Lite competitive Rowed workouts > 20 min, Rowed 1 hr / wk and 5 hrs / mth, been rowing 2 yrs, Never raced before, BMI < 28 (male) or < 27 (female).
- Beginner Never rowed before on-water or indoors.

STEP 7: READ AND ACCEPT THE MEDICAL WARNING

Next is the necessary medical warning about training plans.

MEDICAL W	ARNING	
TRAINING		
is not a statistica personal medica know whether a t	training plans are based upon statistical norms in de al norm! No two human beings are alike. Digital Row I history or fitness level of individual users. There is a training plan is suitable for any given user. Only the consultation with a doctor.	ring doesn't know the no way for Digital Rowing to
Digital Rowing do user's specific po	oes not warrant that the training plan is fit for any sp urpose.	ecific user or suitable for any
Rowing would ne	a computer software company. It is not Licensed to wer give such advice, even if so qualified, purely on t	
	I have read and accept the conditions above.	
	I do not accept the conditions above.	

STEP 8: SET THE START DATE AND GET YOUR PLAN

Finally you get to set the start date of your plan.

Create your Training	g Plan!	Step 8 of 8			
All RowPro training plans start on a N	All RowPro training plans start on a Monday and end on a Sunday. The first two weeks are Technique weeks.				
Training Plan	Dana's Summer Fitness Plan 2011				
-	18 Jul 2011 (Monday				
Start Date	23 Oct 2011				
End Date:	250012011				
Previous Create		Cancel			

Setting the start date

Some points to note:

• All RowPro training plans start on a Monday. If it's not currently Monday and you want to start your plan today, just choose the previous Monday as the start date.

- The first two weeks of each RowPro training plan are Technique weeks where you row slowly and focus on your stroke technique. If you've already done enough rowing so you want to skip the Technique weeks, just set the start date 2 weeks earlier than you would otherwise have set it.
- The End Date is just so you can see when the plan will finish. This is important to get right if for example you're training for a race on a specific day.

Finding your training plan

Once you complete this step, the Training Plan Wizard will close and you'll see the plan you've created listed in Control Center | Training Plans.

If this is the first training plan you've created, it will have a black arrowhead next to it in the list. This indicates it is set as the Active plan, which means that when you go into Session Setup | Training, this is the plan whose sessions will be listed there.

If this is not your first training plan, you'll need to select it, right-click and click Set as Active to make it the Active plan.

Note: the Active plan sessions will only show in Session Setup | Training when they are within +/- three days from today.

3. Rowing your training plan sessions

IMPORTANT MEDICAL WARNING ABOUT TRAINING PLANS

Digital Rowing training plans are based on statistical norms in demographic data.

You are not a statistical norm! No two human beings are alike. Digital Rowing doesn't know your personal medical history nor fitness level. There is no way for Digital Rowing to know whether any particular training plan is suitable for you. Only you can make that determination in consultation with your doctor.

Digital Rowing does not warrant that any specific training plan is fit for you or suitable for your particular purpose.

Digital Rowing is a computer software company. It is not licensed to give medical advice. Digital Rowing would never give such advice, even if so qualified, purely on the basis of information furnished in response to a questionnaire.

RowPro training plans should only be used in conjunction with a comprehensive program involving professional advice, nutritional advice and exercise appropriate to your age, fitness level and medical history.

Consult your Doctor before rowing any RowPro training plans.

Disclaimer

Digital Rowing is not liable for any personal injuries that you may sustain as a consequence of using a RowPro training plan. Digital Rowing is not liable for any personal injuries that you may sustain as a consequence of using RowPro and/or an Indoor Rower, including your selection of various exercise options.

Remember: Physical exertion is healthy. Too much physical exertion is unhealthy. It's a fine line that only you can draw after seeking appropriate professional advice. Use RowPro entirely at your own risk.

Use of RowPro training plans constitutes your acceptance of the foregoing disclaimer.

YOUR TRAINING PLAN LIBRARY

Each time you use the Training Plan Wizard to get a training plan, it appears on the list of Available Training Plans in RowPro Control Center | Training. Right-click on any training plan in the list to get a selection of actions you can do with that training plan:

- **Details** Gives a detailed view of all the sessions in the selected training plan. If you click one of the sessions in this view, you will see a Session Spec for that session, and you can print that Session Spec to help you row a training session without using RowPro.
- **Print** Previews and prints the selected training plan.
- Active Sets the selected training plan as the Active plan, which means that its sessions appear in Session Setup | Training. It is essential that a training plan with a current date range is set as the active training plan; otherwise no training sessions will appear in Session Setup | Training.
- Export Has no function at present.
- **Delete** Deletes the selected training plan.

SETTING THE ACTIVE PLAN

As time passes you will gradually accumulate more and more training plans in your training plan library. Only one training plan can be the Active plan at any time, and this is indicated by the large black arrowhead on the left of the Active plan.

To change the active plan:

- Right-click on the plan you want to make the Active plan.
- Select **Set as Active** from the pop-up list and click OK.

SELECTING A TRAINING SESSION TO ROW

When you're ready to row a training session, open RowPro Session Setup and click Training. Points to note about the training sessions listed there are:

- The list is always centered on "today" and sessions due to be rowed within three days of "today" are listed.
- The training sessions listed are from your currently Active plan. If no plan has been set as Active, or there are no sessions in the Active plan scheduled for today +/- 3 days, then you will see a message saying no sessions are available.
- A Rest Day means you don't row that day. Rest Days are an important part of your training plan, because believe it or not, your body develops while you rest, not while you're rowing!
- Sessions marked Opt are optional you can do them if you want extra workouts, or you can skip them.
- Sessions marked Done have been rowed already, and you would not normally row them again unless something went wrong the first time. If you select a Done training session and click Row, a warning message will appear.

• Sessions marked TT are Time Trials. When you select those sessions, a box appears below the list that allows you to select the set piece you want to row as your Time Trial.

When selecting a training session to row, **ideally you will select the session due today**.

However due to life pressures, you can't always row a planned session on the exact day it is scheduled, so RowPro gives you some flexibility to choose sessions scheduled within plus or minus three days of today. You cannot choose sessions scheduled further away than 3 days from today, because that would seriously compromise your training.

Being able to select sessions from plus or minus three days also makes it possible for you to change the order of the sessions so you end up rowing them out of their planned sequence. Even though you can do this, it's important not to change the order in which you row the sessions, because that would compromise your training.

ROWING EACH TRAINING SESSION

To get the correct training effect when you row a RowPro training session, it is essential that you row within the target heart rate range.

While it is possible to estimate your heart rate range from physical cues, by far the best way to track your heart rate while rowing is to wear a heart rate monitor, and this is strongly recommended.

Ideally your heart rate monitor will be one that can send its signals direct to your Concept2 Performance Monitor, where RowPro can pick it up to display and record it.

Rowing the warm-up and warm-down

Apart from Technique sessions, all RowPro training plan sessions include a warm-up and a warm-down, and these must be rowed.

You can make these longer in Session Setup, but you can't make them shorter than the minimum settings. Typically the warm-up and warm-down are either 2min or 500m, or for some of the more demanding training sessions they are 3 min or 750m.

There are no heart rate, stroke rate or pace targets for the warm-up and warm-down, and you should make a point of rowing them gently.

For the warm-up, start slowly and towards the end of the warm-up, if the training session has intervals, do one or two brief bursts at the pace and stroke rate of the first interval.

Rowing the training session

Keep your Stroke Rate in the green target range on the SPM Indicator on the top frame of the PM twin just above the SPM panel.

Keep your Heart Rate in the pink band shown on the Heart Rate chart in RowPro.

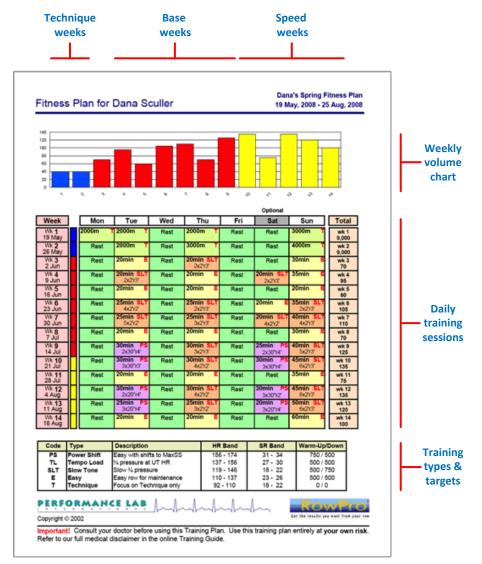
Note: If your heart rate monitor is connected to a watch, keep your heart rate between the upper and lower limits shown in place of the Heart Rate chart in RowPro. If you have no heart rate monitor, follow the cues that are shown in place of the Heart Rate chart.

When you row an Interval training plan session, the Heart Rate and Stroke Rate targets for the Active periods are different from the targets for the Rest periods. As you move from Active to Rest and from Rest to Active, RowPro automatically moves the targets to their correct settings for the Active or Rest period you are rowing, so all you need to do is keep rowing and adjust your rowing to the new targets.

4. Understanding your training plan

WHAT A ROWPRO TRAINING PLAN LOOKS LIKE

If you print out your RowPro training plan it looks like this:



Each area of the training plan printout above is described in the sections below.

HOW THE PLAN IS ORGANIZED

Technique, base and speed weeks

RowPro training plans are made up of three phases:

• **Technique weeks** – There are two optional weeks at the start of each training plan where you row slowly and for small durations with your entire focus on optimizing your stroke technique.

Note: If you're not an experienced rower, we recommend that you row the two technique weeks at the start of your first RowPro training plan. If you want to skip the technique weeks in subsequent plans, you can do so by setting the start date of your training plan two weeks earlier than you intend to start the plan.

- **Base weeks** Most of the training plan is base weeks, where you do the core strength and endurance training to establish your physiological base for the later stages of your plan. The training volumes (meters per week) build progressively.
- **Speed weeks** Once you have the base training 'under your belt' you move onto the final speed phase of your plan where the training volumes reduce again and the training intensity ramps up.

Weekly volume chart

The weekly volume chart shows at a glance the amount of training you'll do in each week of the plan. You can see that the volume starts low, builds up to a peak at the end of the base phase, and then backs off again as the intensity peaks through the speed phase.

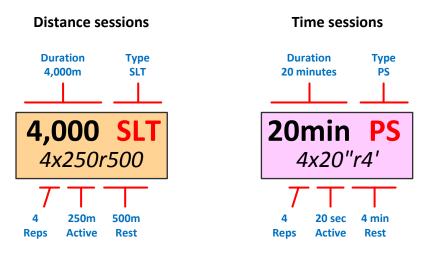
This pattern is important to the effectiveness of your training - it's important to cycle your body through endurance, strength and speed training, even for weight control plans. This stops your body from reaching a plateau due to overly-repetitive workouts.

Daily training sessions

The main body of the training plan printout shows the set of daily training sessions that make up the plan, organized into weeks.

In some plans, one or more days of the week are optional, as shown above that day in the table. Optional means if you want to extend yourself a little you can row that day, or if you want to take it a bit easier you can skip that day every week.

Each individual training session is shown in a short-hand way to save space, like this:



Here's how to read each of the examples above:

The Distance session

- Row 4,000 meters in total.
- The overall session consists of 4 intervals.
- Each interval consists of an Active part and a Rest part.
- The Active parts are 250 meters to be rowed as SLT (Slow Tone).
- The Rest parts are 500 meters to be rowed as Easy (unsaid but standard).

If you set out the intervals one after the other, the resulting sequence would look like this:

- 250m Active Row to the SLT Heart Rate and Stroke Rate targets
- 500m Rest Row to the Easy Heart Rate and Stroke Rate targets
- 250m Active Row to the SLT Heart Rate and Stroke Rate targets
- 500m Rest Row to the Easy Heart Rate and Stroke Rate targets
- ${\bf 250m} \ {\bf Active} {\bf Row}$ to the SLT Heart Rate and Stroke Rate targets
- 500m Rest Row to the Easy Heart Rate and Stroke Rate targets
- **250m Active** Row to the SLT Heart Rate and Stroke Rate targets
- 1,500m Rest Row to the Easy Heart Rate and Stroke Rate targets

You will notice that the last Easy is 1,500m. This is because the 4,000m total is more than the sum of the 4 intervals. This is typical, and all it means is that you continue rowing Easy until you reach the 4,000m total distance.

The Time session

- Row 20 minutes in total.
- The overall session consists of 4 intervals.
- Each interval consists of an Active part and a Rest part.
- The Active parts are 20 seconds to be rowed as PS (Power Shift).
- The Rest parts are 4 minutes to be rowed as Easy (unsaid but standard).

If you set out the intervals one after the other, the resulting sequence would look like this:

- 20 sec Active Row to the PS Heart Rate and Stroke Rate targets
- 4 min Rest Row to the Easy Heart Rate and Stroke Rate targets
- 20 sec Active Row to the PS Heart Rate and Stroke Rate targets
- 4 min Rest Row to the Easy Heart Rate and Stroke Rate targets
- 20 sec Active Row to the PS Heart Rate and Stroke Rate targets
- 4 min Rest Row to the Easy Heart Rate and Stroke Rate targets
- 20 sec Active Row to the PS Heart Rate and Stroke Rate targets
- 6 min 40 sec Rest Row to the Easy Heart Rate and Stroke Rate targets

You will notice that the last Easy is 6 min 40 sec. This is because the 20 minute total is more than the sum of the 4 intervals. This is typical, and all it means is that you continue rowing Easy until you reach the 20 minute total time.

In both the examples above you will notice that in the 4x250r500 and 4x20"r4' there is an r, meaning Rest. This is the cue to row Easy during that part of the intervals. You will occasionally see an s there instead of an r. The s means you Stop rather than rowing Easy during that part of the intervals.

UNDERSTANDING THE TRAINING TYPES AND TARGETS

Each session has a training type associated with it. This gives you the all-important information about how to row the session.

In RowPro training sessions you row to two targets: Heart Rate and Stroke Rate.

Note: You are not rowing to a Pace target in any RowPro training sessions, and this is deliberate. The key things to understand about the two targets are:

- **Heart Rate** By rowing within a specified Heart Rate band, the pace you need to row at automatically goes up when you are fitter. This means:
- 1. The training targets are effectively self-adjusting so they continue to be right for you as your fitness levels change over time.

2. Your body is getting the correct training stimulus because the effect on your body of the training activity is closely linked to your heart rate.

The Heart Rate target ranges listed in the HR Band column in the training types table are derived from your User Profile in RowPro, so they are specific to you.

• **Stroke Rate** – By rowing within a specified Stroke Rate band, the physical impact on your body is predictable. The effect on your body of the training activity is closely linked to your stroke rate.

The Stroke Rate target bands listed in the SR Band column in the training types table are derived from the training plan template and are the same for everyone.

Note: The fact you're not rowing to Pace targets means it's not appropriate to have a pace boat when you're rowing a training session. Some people find this a little disconcerting, but you soon get used to rowing to your Heart Rate, not to a Pace.

The heart rate bands used in RowPro

The reason heart rate is used as one of the targets in RowPro training sessions is that your heart rate is a good measure of the intensity of the training you are doing.

RowPro uses five heart rate bands to express training intensities, as follows:

- 1. **AN** Above the Anaerobic Threshold, up to your Maximum HR.
- 2. **AT** Around the Anaerobic Threshold, your max HR over a long period.
- 3. **UT** Up Tempo, an intermediate intensity.
- 4. **LS** Long Slow, a low intensity.
- 5. **AR** Active Recovery, a very low intensity.

The next step is for RowPro to map each of these bands to heart rate numbers in beats per minute (BPM) that are specific to you.

This is critical to tailoring the training plan to match your physiology.

RowPro has two methods for mapping the heart rate bands to your physiology:

- **Standard method** RowPro uses an industry-standard calculation that takes into account your age and gender to calculate your maximum heart rate, and uses percentages of that to set the heart rate bands.
- **Test-based method** If you know your anaerobic threshold heart rate (AT), for example by doing a Conconi test, you can enter this into your User Profile in RowPro. This enables RowPro to set more accurate heart rate bands for you.

The training types used in RowPro

Each training session in RowPro is a specific training type that has a specific training focus such as endurance, strength, speed, or a combination of these, as follows:

Code	Description	Training Type
BMIB	BMI Burn	Very easy BMI burn - Row at low intensity to improve your fitness and burn body fat.
BPB	BP Bumps	BMIB with shifts to MaxSS - Row at a high Stroke Rate to stimulate your cardiovascular system.
Е	Easy	Easy row for maintenance - This is primarily aimed at low intensity fitness and recovery.
MSS	MaxSS	Maximum Steady State - Row fast for long times to improve your speed endurance.
PS	Power Shift	Easy with shifts to MaxSS - Row short bursts at high levels of effort to develop your muscle power.
SLT	Slow Tone	Slow ³ / ₄ muscle pressure - Row at a low stroke rate to develop your muscular / strength endurance.
SP	Slow Pressure	Slow 75-85% muscle pressure - Row at a low stroke rate to develop your muscular/strength endurance.
ST	Starts	A series of practice starts - Improve your racing technique and performance from the starting line.
Т	Technique	Focus on technique only - Improve your technique to optimize your stroke efficiency.
TL	Tempo Load	³ / ₄ muscle pressure at UT HR - Row strongly at an intermediate tempo.
TT	Time Trial	A trial race - Improve your racing strength/power, technique, efficiency and endurance.

Each training type has heart rate and stroke rate targets associated with it, so when you are rowing a training session you can just focus on staying in the target bands.

When you're rowing an interval training session, you shift from the targets for the Active part of each interval to the targets for the Rest part of each interval and back again.

5. Tracking your training progress

USING ROWPRO ANALYSIS TOOLS

The most important tool for tracking your training progress is the RowPro Analyze tool. This enables you to compare two similar rows and see directly what has changed.

To use the RowPro Analyze tool, select two similar rows in your RowPro rowing log, right-click and click Analyze.

This will show a report in table and chart form that compares the two rows in terms of your performance and your heart rate.

The Analyze report also interprets the comparison between the two selected rows to tell you in plain language whether you've improved and by how much.

TRACKING YOUR IMPROVEMENT

There are several methods for tracking your improvement:

Performance vs. heart rate

The core method for determining if you have improved is to compare your performance and your heart rate between two similar rows.

You have improved if:

- Your performance has gone up for the same or lower heart rate, or
- Your performance is the same for a lower heart rate, or
- Your heart rate has gone down more than your performance, or
- Your performance has gone up more than your heart rate

Improved outcomes

Based on your training purpose and goals, you have improved if:

- You were training to maintain or reduce weight and you have achieved that.
- You were training to improve your racing performance and you have done that.
- You notice a distinct improvement in your endurance, strength or speed.

DEALING WITH THE UNEXPECTED

It pays to know what to do when the unexpected happens. Here are some common issues and methods for dealing with them:

Interruptions to your training schedule

We all know life just gets in the way sometimes and the result is you can't train for a while. This can be a minor issue if the interruption is short or a major issue if the interruption is extended.

The best way to deal with that depends how long your training schedule is interrupted.

Here are some simple guidelines:

- If the interruption is just a day or two You can use the +/- 3 days listed in Session Setup | Training to time-shift any training day by up to +/- 3 days. Note if you do this, take care to maintain the Easy rows between the harder rows in the plan, i.e. don't do a hard row one day and then another hard row the next day.
- If the interruption is less than a week You can push on with the plan, but skip the days you missed. Just restart your training at the new 'today'.
- If the interruption is more than a week You should stop rowing your plan and start a new plan. This is hard to accept, but your body is moving through training cycles, and those cycles are broken if you're off-plan for more than a week. If you just push on with the plan at the new 'today', you'll lose a lot of the benefit of the plan. In the circumstances, shifting to a new plan is a better strategy.

Illness and injury

Apart from the considerations relating to the interruption as noted above, you also need to deal with the fact that you're not at your full capability.

- **Post-injury**, the first consideration is whether you are fit to row at all, and you should be guided by your doctor about that. Don't train while injured without clearance from your doctor. Assuming you are cleared to row, then you should probably start with a Fitness plan with a Tone Up focus, taking care not to over-extend yourself past the set targets in the plan.
- If your injury is due to over-training, you need a different approach. You can tell if you're overtraining by monitoring your improvement. If you're training a lot but steadily measuring negative improvement, then you're probably overtraining. As a first step you should stop training completely for 3-5 weeks and then start training lightly again. If you strike problems again, you may need a longer break.
- **Post-illness**, the first consideration is to make sure the illness is over before you restart training. Don't train during illness without clearance from your doctor. Restart your training based on the amount of time you've been off-plan as discussed above. If it was anything more

than a minor illness, then you should probably start with a Fitness plan with a Tone Up focus, taking care not to over-extend yourself past the set targets in the plan.

Away training

When you are away and can train on a Concept2 Indoor Rower, but not with RowPro, there are some ways you can continue with your RowPro training plan.

- LogCard RowPro enables you to put up to 5 upcoming training sessions onto your Concept2 LogCard. From there you can insert your LogCard into any PM3 or PM4, select one of the training sessions to row, and row it. Your results will be saved on the LogCard (without strokes, and Interval rows will be saved as separate rows). When you get home you can import the results into RowPro.
- Manual RowPro enables you to print out each training plan session in the form of instructions. This enables you to set up a Continuous row manually on any PM2, PM3 or PM4, and while you row, read from the big-font printout (which you can lie on the floor nearby) and adjust your rowing at the meters indicated. When you get home you can manually enter your results into your RowPro rowing log.

PROGRESSING THROUGH THE LEVELS

When you get a new training plan, you build on the old one in two ways:

RowPro training plans require you to row within heart rate and stroke rate targets. If the Wizard gives you the same level of clearance as last time, and therefore the same plan as last time, you will still need to row at a faster pace to have the same heart rate as last time, because you are fitter than before. This means your training plan automatically builds on the old one, even if it's the same plan again.

When you go through the Wizard, you enter information about your rowing history that includes your longest workouts and maximum hours of training per week and per month, also for competition plans you enter your racing history. Often one or more of these numbers has changed because of the training plan(s) you have already completed, and these changes will eventually stimulate the Wizard to clear you for a higher level of training.

Note: You can easily prove to yourself that your new training plan has built on your old one by comparing your performance at the end of the next plan with your performance at the end of the last plan. Unless you are already supremely fit, it's extremely likely you will see an improvement in your performance.

6. Troubleshooting your training

Rowing frequency

When you got your indoor rower you might have intended to just row on the weekend, and certainly that's better than not rowing. However you really need to row at least three times per week to achieve and maintain a healthy fitness if rowing is your main or only form of exercise. All RowPro rowing plans have at least 3 rows per week, and up to 7 rows per week in top-end plans.

At the other end of the scale, you can also over-train. Over-training injuries are becoming more common as more people over-train. If you plan to row more than 7 times per week you probably need to get expert advice to avoid the real risk of over-training problems.

Workout duration

Most people who row at a gym are completely exhausted after 5 minutes on the machine and can't even imagine how anyone could row for 20 minutes or even an hour or more. It just seems impossible.

However it's just a matter of backing off the pace to a level where you can row aerobically, meaning your heart rate stays below your Anaerobic Threshold or AT.

If rowing is your main or only form of exercise, you really need to row a minimum of 20 minutes in any session to get a useful training effect that carries forward to your next workout to produce and maintain a healthy fitness.

Virtually all the workouts in RowPro rowing plans are at least 20 minutes long, and can be a lot longer depending on the type and level of rowing plan.

At the other end of the scale, once you're rowing sessions longer than an hour you need to take measures to keep hydrated, plus most people rowing marathon distances also need to use special seat padding arrangements and possibly hand protection to avoid problems from excessive rubbing. Ask around the forums for advice from seasoned veterans of longer rows.

Workout type

A very common pitfall is to find a workout type that suits you, like say 30 minutes hard work, and just repetitively do that workout whenever you row.

The reality is your body needs a combination of strength, speed and endurance work to maintain a healthy fitness, and this means you need to mix it up a bit.

The workouts in RowPro rowing plans are a professionally-designed mix that cycle your body through a series of strength, speed and endurance phases to produce the training effect you are working towards.

So if you've never done an Interval workout and are hesitant to start, just go with what the rowing plan says and you'll quickly start enjoying the variety.

Damper setting

The damper setting is possibly the most poorly understood variable.

There's a popular gym cult that "you're not a real man unless you row with the damper on 10", but this is rubbish. Think of a 10-speed bike. Who in their right mind would say (or believe if told) "you're not a real man unless you ride in 10th gear"?

The bike gear lever and the rowing damper are very similar. Concept2 has cleverly arranged the math inside the PM to ensure this is the case. You can easily prove this to yourself by monitoring your heart rate and rowing with different damper setting. Provided you stay at the same SPM and Pace, your heart rate will be the same regardless what damper setting you choose.

The reality is that like higher gears, higher damper settings require more muscular strength, but you go further with each push / pull. On a bike, you quickly work out which is the optimum for you – too high and your muscles get really tired, too low and you're wasting too much energy just moving your legs back and forth.

People rowing soon work out their own optimum damper setting. On Concept2 Indoor Rowers, women and lightweight men tend to row with a damper setting between 3 and 5, and heavyweight men tend to row between 3 and 7.

Heart rate

Your heart rate is like a meter telling you how hard you're working, which is why it's so important to monitor your heart rate while you row, particularly when you're rowing to a plan, and to keep your heart rate within the target band for your workout.

The first thing to realize is that rowing for more than a few minutes is only possible if you keep your heart rate below your Anaerobic Threshold or AT, otherwise your muscle cells simply run out of the energy that fuels Anaerobic work, with the result that your muscles suddenly feel dead - it's called "hitting the wall".

The question is how to tell what your AT is. To avoid you having to do a test, RowPro uses a simple age-based formula, however this is conservative, so if you're already quite fit you may find this results in your heart rate target ranges feeling too low when you do a RowPro rowing plan.

The 'correct' solution is to do a test to determine your AT and then plug that into your User Profile in RowPro. Ideally this test should be done while rowing on a Concept2 Indoor Rower. Testing to find your AT is commonly done either by Lactate testing involving pinpricks to take blood samples, or by a Conconi test involving ramping up intervals and monitoring your heart rate until you physically have to stop.

Either way, testing requires maximal effort, so if you plan to do a test you should work with a professional who knows what to do and you should get clearance from your doctor first.

There are other heart rate ranges below your AT, and it's important to stay in these ranges to get the intended training effect. For example, if you're wanting to do a fat-burning row, you need to keep your heart rate well down in the appropriate range, otherwise you'll get a good cardio workout but won't burn much fat.

Stroke rate

Stroke rate is one of the most important variables in your rowing, as it has a major effect on the type of workout your body gets. A "middling" stroke rate would be around 22-26 SPM. When you go lower than that, say 18-22 SPM, this is more demanding on your muscles and is basically a strength workout. When you go higher, say 26-30 SPM, you're moving more into cardio-respiratory work, and over 30 SPM you're doing speed work.

All of these are important types of work you need to cycle your body through for effective training. It's important not to just settle on one stroke rate and always do that for all your workouts, because you'll be missing out on the other workout types and your training will be less effective in delivering the results you want.

A note of caution though: Take care when rowing under 20 SPM, because the load on your lower back muscles in particular is substantial. If you find your lower back gets sore, increase your stroke rate a little and ease off the pace until you can row without any soreness or pain, then gradually come back down to the lower stroke rate again.

Stroke technique is also critical at lower stroke rates. A common problem in stroke technique is "shooting the slide", and doing this while rowing under 20 SPM is really bad for your lower back muscles and can lead to injury. To explain:

At the catch your trunk is leaning slightly forward and your knees are folded up. At the finish your trunk is leaning slightly rearward and your knees are straight. As you move from the catch to the finish, you need to progressively tip your trunk from the forward tilt at the catch to the rearward tilt at the finish.

The thing not to do is leave your trunk tipped forward while you drive with your legs, and only begin tipping your truck rearward when your legs are more or less straight - that's what "shooting the slide" means, and that's what overloads your lower back muscles. For guidance, look at the coaching clinic and match the way the Oarsman does it there.

One other common pitfall is that at first it seems completely counter-intuitive to pull a lower SPM at a higher pace, but it's definitely possible and an important skill to master. RowPro can train you in this. Follow the timing of the Oarsman on-screen to get your drive and recovery sensible. The Oarsman does the correct drive to recovery timing when you row at any given SPM. Basically you do a slower recovery, rather than pausing anywhere in the stroke.

Also, click Coaching Clinic on the RowPro main menu, and click the Stroke Rhythm button beside the coaching notes. You'll see the drive to recovery ratio changes with slower SPM. It's this changing ratio you need to learn to do, so your drive to recovery timing is optimized for your SPM at any given time. It feels very odd at first, but as you get more skillful at it you'll find eventually it becomes second nature.

Pace

For many people, pace is the first thing on their mind, whereas it probably should be the last. You may have noticed that when you row sessions from a RowPro rowing plan, a) there is no pace target, and b) you can't use a pace boat.

Both of these are deliberate. To get a given training effect from a workout, you need to row for a specific time at a specific stroke rate and in a specific heart rate range. When you do that, the resulting pace is just that - a result. When you row at a certain heart rate, then the pace is what it is. When you get fitter, your pace will be faster at the same heart rate as when you were less fit. In this way your training automatically adapts - you row at a faster pace when you're fitter.

The key point is that it's your heart rate and stroke rate that determine the training effect you get, not your pace. This is also why you should not train with a pace boat unless you're specifically needing to train at a specific pace.

The math for pace is that Pace = SPM x DPS, where DPS is the Distance per Stroke. This means that to go faster, you need to either increase SPM without conceding DPS, or vice-versa. This is easier said than done! Interestingly, there is a slight HR advantage if you row the same pace at a lower SPM, hence if you're training for competition it's a good idea to include plenty of low stroke rate strength workouts.

RowPro competition plans include lots of strength workouts. They deliver a performance peak at a defined date to optimize race results, while recognizing that achieving high peaks on race day requires dropping off those peaks in between, hence the training varies. The bottom line is that always doing the same training and seeking to just incrementally get faster has in-built limits that are lower than proper peaking, and you can readily prove this to yourself by trying it each way.

7. Getting help

RowPro Help

Your first port of call for help is the built-in RowPro Help. To launch it click Help on the RowPro main menu, or press the F1 button for context-sensitive help on major forms.

RowPro Help Online

The entire RowPro Help is avaliable online at www.digitalrowing.com

Troubleshooting

RowPro Help and RowPro Help Online have a complete Troubleshooting section that covers all the common problems you may encounter and how to resolve them.

Information and assistance

For free and friendly personal assistance, email <u>assist@digitalrowing.com</u>.

This is also available to tryout users.