

RowPro Venue Racing Guide



Keeping you rowing



Welcome

RowPro Venue Racing Guide

by Digital Rowing

This guide is designed to get you up and running with RowPro Venue Racing as smoothly as possible, and to help you quickly resolve any issues.

If you need assistance, please contact assist@digitalrowing.com

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1 Venue Racing Guide

Venue Racing Guide

Venue Racing enables you to connect multiple Concept2 Indoor Rowers to a RowPro PC and conduct on-site races in real time. An Internet connection is not required for Venue Racing.

See the following Help Subtopics for more information about Venue Racing:

- [Getting started](#) ²
- [Venue Racing reference](#) ⁵

1.1 Important medical warning!

MEDICAL WARNING

TRAINING

Digital Rowing's training plans are based on statistical norms in demographic data. Each user is not a statistical norm! No two human beings are alike. Digital Rowing doesn't know the personal medical history or fitness level of individual users. There is no way for Digital Rowing to know whether a training plan is suitable for any given user. Only the user can make that determination in consultation with a doctor.

Digital Rowing does not warrant that the training plan is fit for any specific user or suitable for any user's specific 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.

Digital Rowing's training plans should only be used in conjunction with a comprehensive program involving professional advice, nutritional advice and exercise appropriate to each user's age, fitness level and medical history.

Digital Rowing shall not be liable for any personal injuries that any user may sustain as a consequence of using Digital Rowing's training plans. Digital Rowing shall not be liable for any personal injuries that any user may sustain as a consequence of using the rowing machine, including the user's selection of various exercise options.

RACING

Do not race unless you are in good physical condition. Do not race if, on race day, you feel unwell or have recently been suffering from a physical injury or illness. Indoor rowing racing requires maximal effort and Digital Rowing takes no responsibility for illness or injury caused as a consequence. If you have any doubts, seek medical advice prior to racing.

PHYSICAL EXERTION

Physical exertion is healthy. Too much physical exertion is unhealthy. It's a fine line that only the user can draw after seeking appropriate professional advice. Users use RowPro entirely at their own risk.

Use of RowPro by any user shall constitute the user's acceptance of the foregoing Medical Warning disclaimer.

Digital Rowing Inc. USA

1.2 Getting Started <- START HERE

What is Venue Racing?

Venue Racing is connecting multiple Concept2 Indoor Rowers to RowPro, setting up a venue race on all connected PMs, and enabling them all to race each other.

During a venue race, the participants' boats are displayed on the RowPro screen, moving along exactly in accordance with the meters rowed by each participant.

Venue Racing enables schools, colleges, clubs, universities, gyms, military units and many other organizations to arrange on-site competitions using their multiple Concept2 Indoor Rowers.

How does it work?

While the venue race is underway, RowPro exchanges information between the participants' Concept2 PMs to show participants the position of the leader and other nearby participants in real time throughout the venue race.

RowPro also shows the position of all boats onscreen in real time.

1.2.1 Equipment and versions required

Concept2 Indoor Rowers

Any Concept2 Indoor Rower can be used with RowPro for Venue Racing, provided the Indoor Rowers are equipped with PM4 or PM3 Performance Monitors, or a combination of these.

Concept2 PM Firmware

The following firmware and software versions are required for Venue Racing:

PM4 firmware

Must be at least Ver 19 Beta 5. To check, from the PM3 Main Menu select More Options / Utilities / Product ID and look at the bottom of the PM4 display screen. Digital Rowing strongly recommends you regularly upgrade your PM4 firmware to the latest version. For updates, visit www.concept2.com, download and install the latest PM4 firmware version, connect your PM4 to your PC and run the update, which installs itself automatically.

PM3 firmware

Must be at least Ver 99 Beta 5. To check, from the PM3 Main Menu select More Options / Utilities / Product ID and look at the bottom of the PM3 display screen. Digital Rowing strongly recommends you regularly upgrade your PM3 firmware to the latest version. For updates, visit www.concept2.com, download and install the latest PM3 firmware version, connect your PM3 to your PC and run the update, which installs itself automatically.

RowPro

Must be at least Release 2.2. To check, start RowPro and look at the large numbers on the Splash Screen (the first screen that appears while RowPro is starting). Digital Rowing strongly recommends you regularly upgrade RowPro to the latest version. For updates, visit www.digitalrowing.com and download and install the latest release of RowPro.

1.2.2 Connecting indoor rowers

Number of PMs

RowPro can connect to up to 16 Concept2 PM3s, PM4s or a combination of these.

Note: PM2+ monitors can not be used for Venue Racing with RowPro.

The RowPro License controls how many PMs RowPro support:

- 20-day Free Tryouts support 16 Concept2 PMs
- RowPro School Edition and Gym Edition support 4, 8, 12 or 16 PMs depending on the RowPro License.
- RowPro Home Edition supports only one PM.

PM connection options

PM4s have both USB and Serial connections. RowPro can presently only use the USB connections.

PM3s have only USB connections and RowPro uses these.

USB connection schemes

The typical USB connection scheme is to connect a number of PMs to a USB hub via the USB cable supplies with each Concept2 Indoor Rower, then connect the USB hub to the RowPro PC using the USB cable supplied with the USB hub.

Multiple USB hubs may be used if required to connect all PMs.

Important notes:

- The USB hub and the USB port on the RowPro PC **must be USB 2.0** to work with RowPro.
- The maximum USB cable length is 15 feet (approx 5 meters). This constrains the possible floor layouts of Indoor Rowers and needs to be planned carefully to ensure all PMs can be reached within this cable distance limit.

Serial connections

RowPro cannot presently use PM4 serial connections.

1.2.3 Physical layout of indoor rowers

Physical layout vs logical layout

Before setting up a venue race, you need to inform RowPro which Indoor Rower ("Erg") is which, so the participants can be directed to the correct erg and RowPro positions them in the correct lane onscreen and captures their results correctly.

Physical layout

This is the arrangement of ergs as they are physically set out on the floor. The ergs should be tagged Erg 1 through Erg n once the mapping is complete so participants know which erg to use.

Logical layout

This is the arrangement of ergs as RowPro treats them in the venue race. RowPro tags them Erg 1 through Erg n as part of the mapping process using the Indoor Rower Layout utility.

Mapping physical payout to logical layout

RowPro contains an Indoor Rower Layout utility to map physical to logical erg layout. You must use this utility before you can set up a venue race.

To open the Indoor Rower Layout utility, click the down arrow next to the Control Center button on the RowPro main menu.

When you're done, you can save the layout you have mapped. Once you do this, RowPro will subsequently use this layout map by default every time you start RowPro. If you later want to clear, change or replace this map, you can do so in the Indoor

Rower Layout utility.

The Indoor Rower Layout utility

Before you use this utility you must connect to the RowPro PC all the PMs you want to map.

Mapping the erg layout

To start mapping the ergs, click Start. RowPro initiates the PMs and puts them into a special mapping mode, where they all display a large question mark (?) on their screen.

Go to the erg you want to make Erg #1 and press the button on that PM. This will show Erg #1 on its screen. Press the button to confirm. Go down the line of ergs repeating this at each PM until they are all done. As you confirm each erg number, that PM is listed in the Indoor Rower Layout utility.

When you're done, click Save and Close.

Clearing the erg layout

If you want to change RowPro so it reverts to single-erg use, you can clear the saved erg layout by clicking the Clear button in the Indoor Rower Layout utility. After you clear the erg layout, RowPro will revert to single-erg use until you map and save another erg layout.






Changing the erg layout

If your erg layout changes, for example you go to a different venue, or set the ergs out differently on the floor, or one PM needs to be replaced, you can change the erg layout by simply creating a new erg layout using the Start button in the Indoor Rower Layout utility.

1.3 Venue Racing reference

Venue Racing Reference

See the following Help Subtopics for reference information about Venue Racing:

- [Race display options](#) 
- [Setting up a venue race](#) 
- [Starting a venue race](#) 
- [Rowing a venue race](#) 
- [Viewing race results](#) 

1.3.1 Race display options

RowPro has both a 2D and a 3D display, and either can be used for Venue Racing.

- Some people prefer to use the 2D Display for Venue Racing, because it shows a lot more course length onscreen than the 3D Display, making it easier to keep track of participants that are scattered up or down the course.
- The 3D Display is best used in Broadcast Camerawork mode for Venue Racing, because it includes a course radar that is like a mini version of the 2D display.

For more information:

- See the System Settings Help Topic for details on selecting the 2D or 3D Display.
- See The 2D Display and The 3D Display Help Topics for details about using each of the displays.
- See the [Rowing a venue race](#)^[9] Help Topic for details about what each of the displays shows during a venue race.

1.3.2 Setting up a venue race



Setting up a venue race

To set up a venue race:

- Connect your RowPro PC to your PM4s and/or PM3s as described in the Help Topic [Connecting Indoor Rowers](#)^[3].
- If you haven't already done so, set up your [Indoor Rower Layout](#)^[4].
- Start RowPro and open Session Setup / Venue.
- Select any race listed in the panel in the center of Session Setup / Venue to set up a race that was previously saved.
- Alternatively, click Create Quick Race to set up a new venue race.
- Click Row to move the race on to the Check-in stage and display the Check-in and Start form.

Participant status indicators

Each participant has a status icon on the Check-In and Start screen. These have the following meaning:

Icon	Meaning
	Checked in and ready
	Flywheel moving or false started

1.3.3 Starting a venue race

Functions of the Starter

The Starter:

- Normally does not row in the race, but can do so.
- Is responsible for starting the race:
 - Clicks Prepare to Start, which sets up the race on the Concept2 PMs in the race.
 - Clicks Start, which starts the race.

Participants

Participants need to:

- Wait for the Starter to click Prepare to Start. Participants can warm up during this time.
- Wait again for the Starter to click Start.

The Check-In and Start Screen

The Check-In and Start Screen is a very important screen - it's the hub of the real-time activities leading up to the race start.

As the name suggests, the Check-In and Start Screen has two modes: Check-in, and Start.

Check-In

When you first arrive in the Check-In and Start screen the race is at the Check-In stage. In this stage, the participants are gathering and the Concept2 PMs are in pre-session warm-up mode. At this stage participants can do a warm-up row. Any warm-up rowing they do is treated as a Just Row on the Concept2 PM.

Withdraw

If you need to exit from the race at this stage, you can click Withdraw. This effectively cancels the race. You can do the race again by setting it up again in Session Setup.

Prepare to Start

When everyone is ready the Starter clicks the Prepare to Start button. This shifts the Check-In and Start screen on to the Start mode. In this stage:

- The participants strap in and pick up the handle to prepare to start the race.
- The warm-up is removed and the race is set up on the Concept2 PMs.
- The Prepare to Start button is replaced by the Start button.
- The participants' boats are positioned in the appropriate lanes in the 2D or 3D Display.
- Each participant's Indoor Rower is actively monitored to check for flywheel movement, and if anyone's flywheel moves their icon changes to show a rotating flywheel until they stop.

Start

The only thing the starter must wait for before clicking Start is for all flywheels to be still. If Start is clicked while a flywheel is moving, this will immediately trigger a false start.

When ready, the Starter clicks Start and the start sequence begins.

Start sequence for PM4 or PM3

When the Starter clicks Start:

- A voice says "Prepare for Start" (provided your PC is equipped for sound and you have set the volume appropriately).
- The Check-In and Start Screen disappears.
- A small message screen appears saying to watch the PM4 or PM3 display.
- The PM3 or PM4 display moves through the following start sequence in a few seconds:

Sit Ready

Participants should be fully ready to pull the handle and start rowing.

Attention

Participants should now be actively waiting for the start.

Row!

Participants should pull the handle - the race has begun!

False start



From the moment the Start Sequence begins until the Row! message appears to signal the start of the race, any flywheel movements will result in a False Start, in which case the following will happen:

- The Start Sequence will be terminated.
- The Check-In and Start screen will re-appear and will show False Start!
- The Participant Status of the person who false started will show a rotating orange flywheel.
- After 20 seconds, the Check-In and Start screen will return to normal.
- Once all flywheels have stopped moving, the Starter can restart the session the same way as before.

If a participant false starts more than once, the Starter may choose to start the race without them.

Participant status indicators

Each participant has a status icon on the Check-In and Start screen. These have the following meaning:

Icon	Meaning
	Checked in and ready
	Flywheel moving or false started

1.3.4 Rowing a venue race

Information exchange

While the venue race is underway, RowPro exchanges information between the participants' Concept2 PMs to show participants the position of the leader and other nearby participants in real time throughout the venue race.

RowPro also shows the position of all boats onscreen in real time.

The Concept2 PM display

Participants will notice on the Concept2 PM display the race proceeds just like any other RowPro session, except that the bottom half of their Concept2 PM screen shows four lines of position information relative to other participants.

During the online session these four lines show:

1. The leader

This shows the lane number and name of the person in the lead, and the number of meters ahead of the participant.

2. The person ahead of them

This shows the lane number and name of the person ahead of the participant, and the number of meters ahead.

3. Themselves

This shows the participant's lane number and name.

4. The person behind them

This shows the lane number and name of the person behind them, and the number of meters behind.

The 3D Display

During the venue race the RowPro 3D display shows the following:

Lanes

There are up to 16 lanes instead of the usual four. The boats are in the lanes starting from the far lane (the one nearest the shore) which is Lane 1. The participants are in the lanes they were allocated on the Check-In and Start screen.

Participant colors

Race participants are displayed in the colors specified by the race organizer in Session Setup.

Course radar

There is a small radar panel at the bottom right of the 3D Display with a triangle representing each boat. The center section of the course radar represents +/- 100m, and the 'slots' to the left and right of the center section represent 100-200m, 200-500m, 500-1000m, and over 1000m.

The course radar therefore covers the entire length of the course, and enables the race starter and any audience to see at a glance where any boats are that

are not currently in the main 3D view because they are out of camera range. You may prefer to use the 2D display if you want more of the course to be visible onscreen.

Pace display

On the right of the 3D display is a Pace display that shows each participant's average pace.

Boat movement

Each participant's boat moves in response to their rowing according to information about their boat position received by RowPro from their Concept2 PM.

The 2D Display

During the venue race the RowPro 2D display shows the following:

Lanes

There are 8 or 16 lanes depending on the number of participants in the venue race. The boats are in the lanes starting from the top lane which is Lane 1. Participants are in the lanes they were allocated on the Check-In and Start screen.

Pace display

On the right of the 3D display is a Pace display that shows each participant's average pace.

Boat movement

Each participant's boat moves in response to their rowing according to information about their boat position received by RowPro from their Concept2 PM. The 2D display auto scales from 100m to 1,000m of the rowing course to keep all boats visible. If the separation between boats exceeds 1,000m the slowest boats will move off the screen.

1.3.5 Viewing race results

Where to see results for venue races

Participants can view venue race results in a number of places:

The Concept2 PM screen

When the venue race is finished the four lines of information at the bottom of each Concept2 PM screen show:

1. The leader

This shows the lane number and name of the person who finished first, and their finish time (for distance races) or finish distance (for time races).

2. The person ahead of them

This shows the lane number and name of the person who finished directly ahead, and their finish time (for distance races) or finish distance (for time races).

3. Themselves

This shows their lane number and name, and their finish time (for distance sessions) or finish distance (for time sessions).

4. The person behind them

Until the person behind them finishes, this continues to show their lane number, name and number of meters behind. Once they finish, this shows their lane number and name, and their finish time (for distance sessions) or finish distance (for time sessions).

The 3D or 2D Pace Display

At the end of the online session, all the boats stop at the finish line and the Pace display at the right of the 3D or 2D Display changes to show the total time (for distance sessions) or distance (for time sessions) for each participant.

The Session Results form

When the venue race is finished, a Session Results screen similar to the Check-In and Start screen pops up. This shows the placing of each participant. Clicking Finish on this screen exits the venue race and resets RowPro.

The RowPro Race Log

As soon as the venue race is over and you click Finish on the Session Results form, the strokes, splits and totals for each participant are stored in the RowPro Race Log automatically in the same way as when you complete any other RowPro session.

To access results in the Race Log, click the My Log drop-down list at the bottom right of the RowPro rowing log and select Race Log. Every participant will have a separate result listed there.

All of the normal RowPro functions are available for the Race Log and all results listed there.