

# **OARTEC DX**

## **OARTEC TRAINING MONITOR OTM-2**



**OPERATION MANUAL**

# Introduction

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Thankyou for purchasing the Oartec DX with our new training monitor, the OTM-2.

The OTM-2 has a number of advanced features including automatic power on, large LCD display, menu based navigation, preset workout selections as well as recording and storing every workout in memory and automatically pairing to your ANT+ heart rate chest belt.

The OTM-2 is powered by 2 x alkaline D cell batteries with an expected usage time of 250 hours.

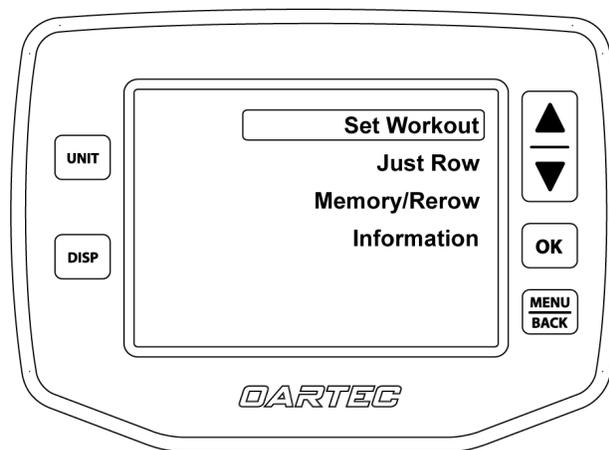
Future software updates, including new features and functions, will be easily uploaded using file transfer via USB flash drive, which inserts into the back of the monitor.

Scores are calibrated to the industry standard and are comparable from machine to machine.

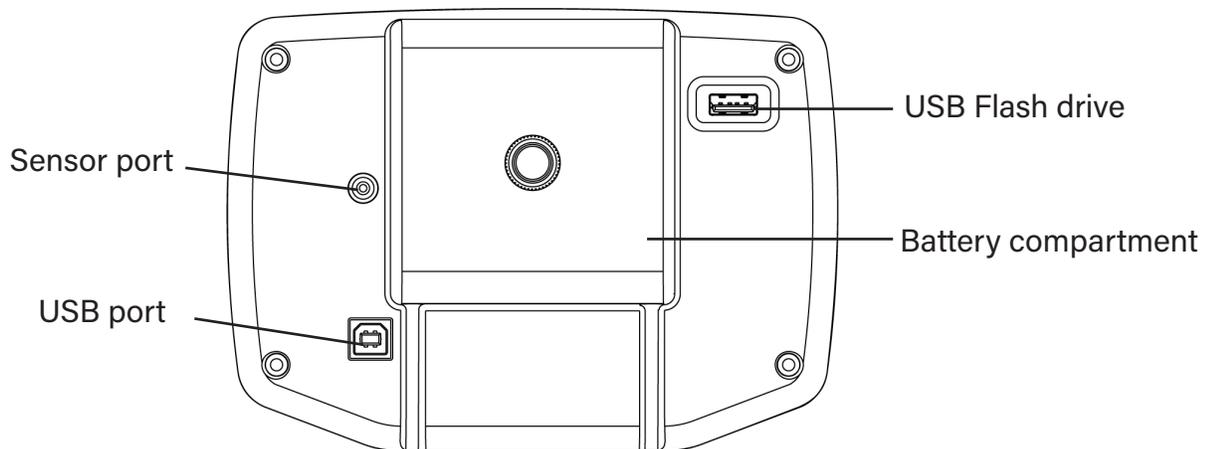
We hope you will enjoy rowing the DX and using the OTM-2.

# Specifications

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- Menu based navigation
- Monochrome LCD Graphic Display
- 3.5"/90mm x 2.7"/70mm viewing area
- ANT+/Bluetooth capabilities
- USB flash drive data transfer
- USB port for connection to computer
- Powered by 2 x alkaline D cell batteries



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# 1. Getting Started

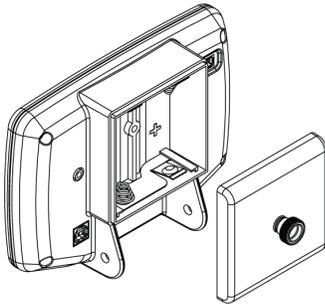
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Please read the following procedures before using your OTM-2 for the first time.

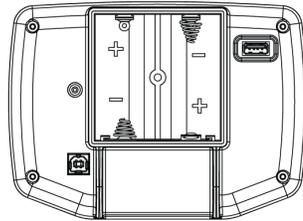
## Installing the Batteries

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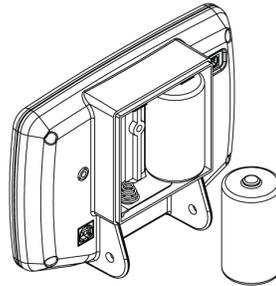
The OTM-2 uses 2 x alkaline D cell batteries. Follow the simple process to install the batteries.



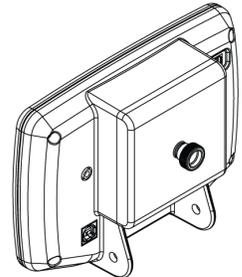
Loosen the knob that holds the battery cover. Remove battery cover.



Check the +/- orientation of the battery compartment.



Install 2 x D cell batteries.



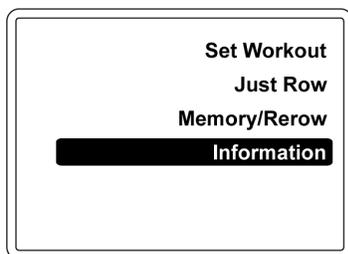
Replace battery cover

## Setting Date and Time

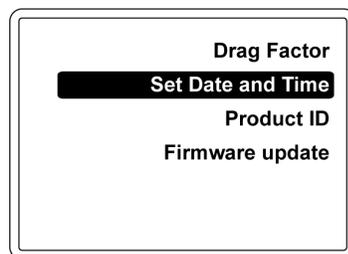
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Before you use the OTM for the first time, please ensure that the correct date and time are set. Once time and date are set it will remain current, even when replacing the main batteries, as the OTM has a smaller back up battery to maintain the time and date setting from then on.

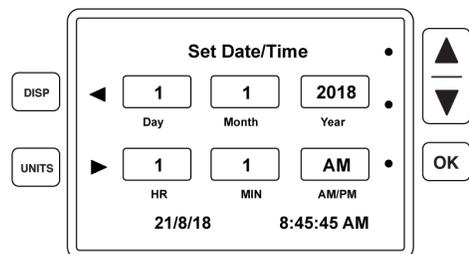
To set date and time follow the simple procedure below.



Press **MENU** button  
**ARROW** to **Information**  
Press **OK**



**ARROW** to **Set Date and Time**  
Press **OK**



Edit values using **ARROW** button.  
Press **UNITS** to select fields.  
Press **OK** to complete.

## 2. Operation

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### Turning the OTM On/Off

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The OTM is programmed to automatically power on once you start rowing.

It will start in **Just Row** mode where if you continue rowing, the distance and time values will start to count up.

Alternatively turn the monitor on by pressing the **MENU/BACK** button. It will open with the main menu screen.

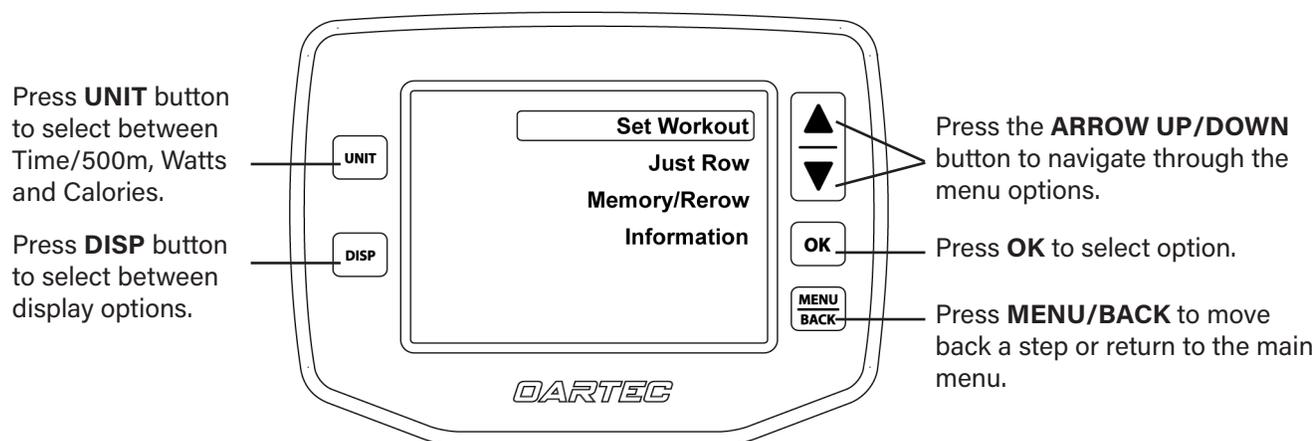
To manually turn the monitor off, press and hold the **MENU/BACK** for 3 seconds until it powers off.

The OTM will also automatically turn itself off after no activity for 3 minutes.

### Main Menu/Navigation

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The OTM opens to the main menu screen.



### Pairing Heart Rate

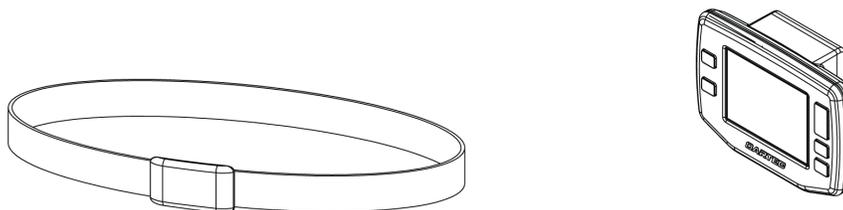
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The OTM is compatible with all Ant + protocol heart rate chest belts.

The OTM will automatically detect the closest available ANT + heart rate belt and display the value on the display screen top left hand field.

The OTM has a detection range of about 8 - 12 ft/3 - 4 metres. If the OTM loses connection with the heart rate belt it will pause on the last detected transmission before showing no value at all.

**WARNING: Heart rate systems may be inaccurate due to interference or fluctuation in chest belt transmission. Please immediately stop activity if you feel faint or overwhelmed. Over-exercising may result in serious injury or death.**

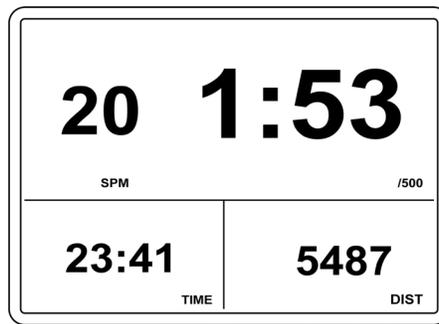
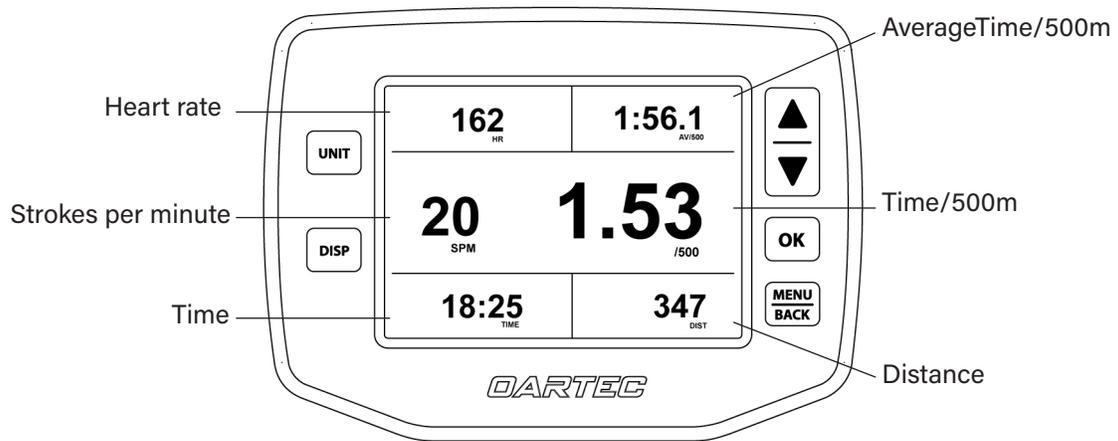


The OTM automatically pairs to the closest available ANT + heart rate chest belt.

## Display Options

The OTM default display screen is the Time/500m screen below.

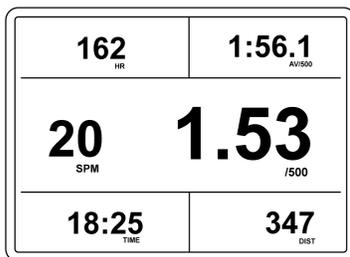
Press the DISP button for other screen options



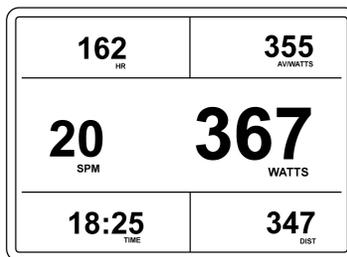
Large screen layout

## Units

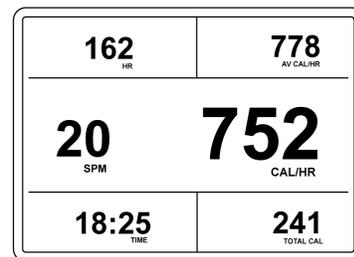
Press the UNITS button to change the units of workout intensity between Time/500m, Watts and Calories screens.



Speed in Time/500m



Power in Watts

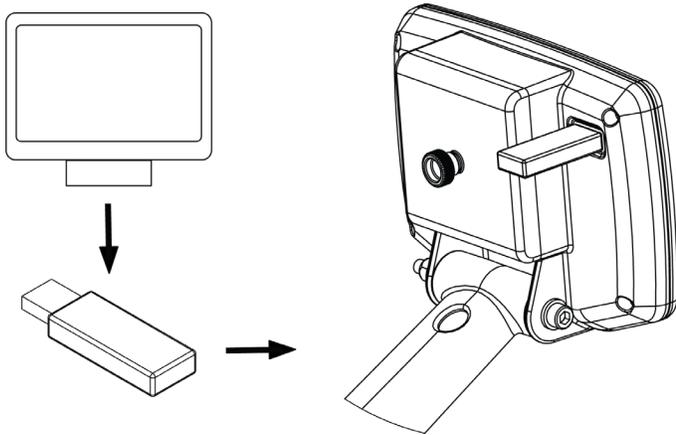


Calories in Calories per hour

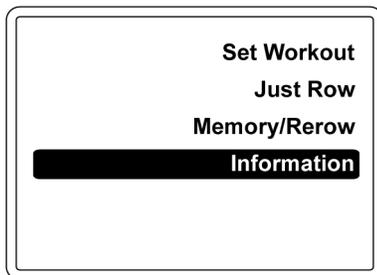
## Firmware updates

The latest firmware updates can be downloaded from the Oartec website [www.oartec.com/otm-2](http://www.oartec.com/otm-2)

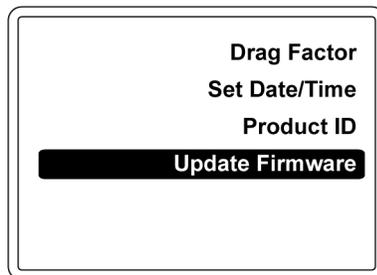
The OTM uses a USB flash drive to transfer the file from your computer to the OTM.



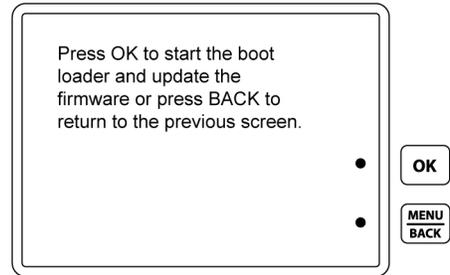
Download the latest OTM firmware version from [www.oartec.com/otm-2](http://www.oartec.com/otm-2)  
Upload OTM firmware file to USB flash drive.  
Insert flash drive into OTM.



Press **MENU** button  
**ARROW** to **Information**  
Press **OK**



**ARROW** to **Firmware Update**  
Press **OK**



Make sure latest OTM firmware version is on the USB and the USB is properly inserted into OTM.  
Press **OK** to start update process.  
Wait for successful update and exit.

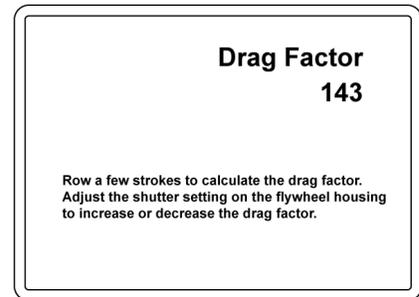
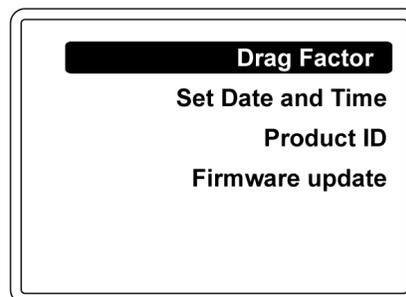
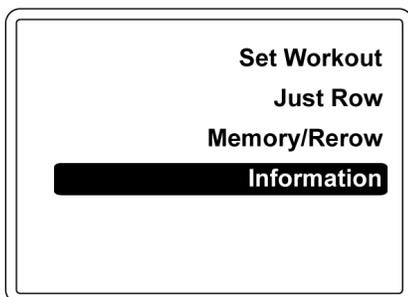
## Setting Drag Factor

The flywheel resistance setting on the DX can also be displayed as a numerical Drag Factor value.

Navigate to the Drag Factor screen and row a few strokes to see the DF value for that resistance setting.

Changing the position of the intake dial will increase or decrease this value.

The higher the value the higher the resistance.



### 3. Setting Workouts

#### Just Row

Just Row workouts are ideal for quick warm ups or for rowing as far as you feel like going.

Time and distance values both start from zero and count up as you row. With no set finish point, the workout ends when you stop rowing and the flywheel slows. Time and distance will stop at the last calculated value.

You can pause a workout for up to 3 minutes before the monitor automatically turns itself off. After a pause, you can recommence rowing and the distance and workout time will continue counting up again.

Just Row workouts however won't be recorded as a workout in the OTM workout memory but the workout time and distance will be accumulated in the monthly totals and lifetime meters.

#### Setting Time and Distance Workouts

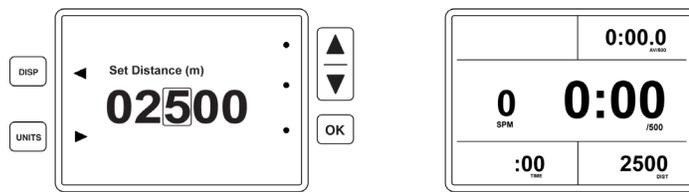
Time and distance workouts can be custom programmed quickly or selected from preset lists.

Set workouts count down the set time or distance and display the final results once completed.

All set workouts are saved in the OTM memory.

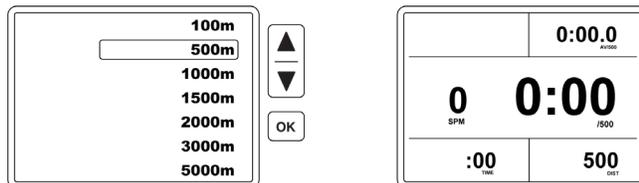
#### Set Custom Distance Workout

MENU-SET WORKOUT-DISTANCE-CREATE NEW - EDIT WORKOUT - READY TO START



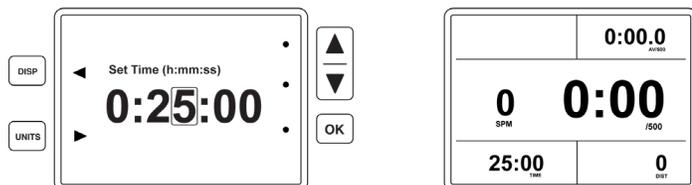
#### Select from List Distance Workout

MENU-SET WORKOUT-DISTANCE-SELECT FROM LIST - SELECT WORKOUT - READY TO START



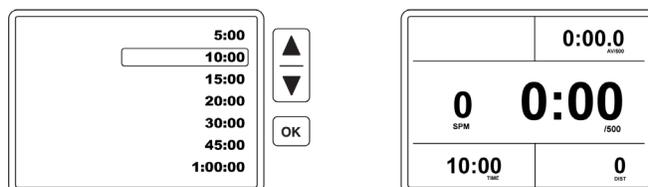
#### Set Custom Time Workout

MENU-SET WORKOUT-TIME-CREATE NEW - EDIT WORKOUT - READY TO START



#### Select from List Time Workout

MENU-SET WORKOUT-TIME-SELECT FROM LIST - SELECT WORKOUT - READY TO START



## Setting Variable Interval Workouts

Variable interval workouts are workouts with multiple intervals that can be programmed to use either time or distance work followed by either rest or no rest. Up to 20 different intervals can be set with varying time, distance and rest values.

Variable intervals have to be programmed and the workout completed before they are stored in memory to have the option of being re rowed instead of programmed each time.

### SET WORKOUT VARIABLE INTERVAL

**INTERVAL 1 - SELECT TIME/DISTANCE - EDIT WORKOUT - EDIT REST,  
 INTERVAL 2 - SELECT TIME/DISTANCE - EDIT WORKOUT - EDIT REST,  
 INTERVAL 3 - SELECT TIME/DISTANCE - EDIT WORKOUT - EDIT REST -  
 INTERVAL 4 - SELECT TIME/DISTANCE - EDIT WORKOUT - EDIT REST - OK**

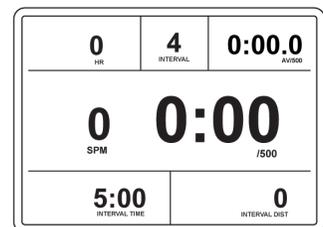
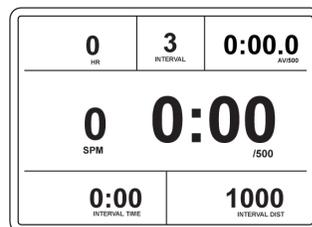
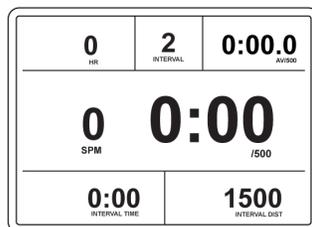
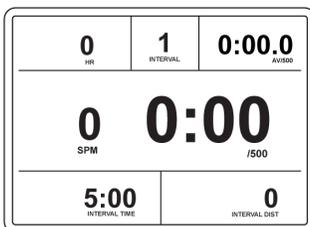
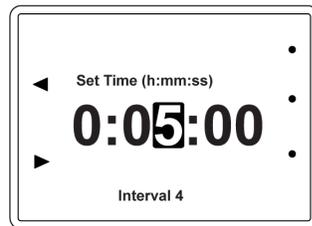
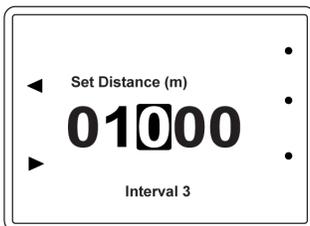
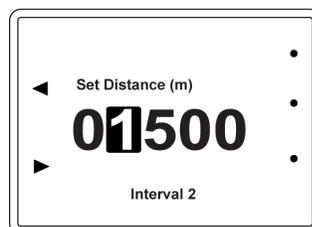
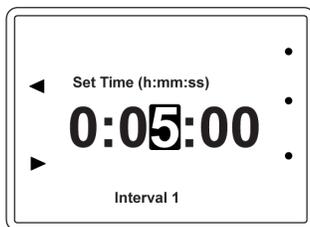
Example below:

Interval 1 - 5 min warm up/1 min rest

Interval 2 - 1500m row/4min rest

Interval 3 - 1000m row/3 min rest

Interval 4 - 5 min warm down/ zero rest



## Setting Repeat Fixed Interval Workouts

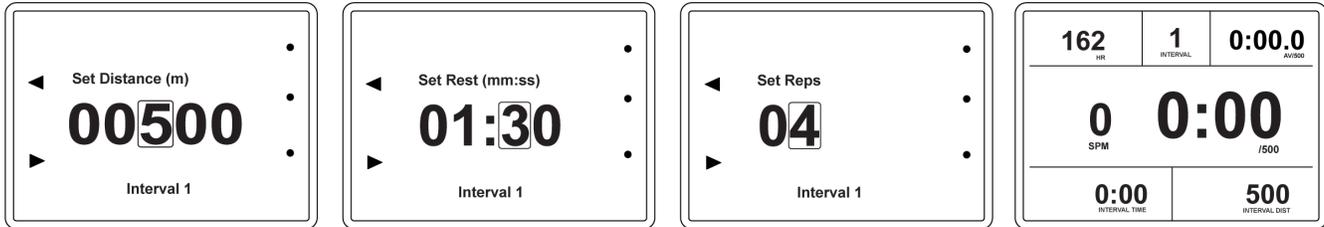
Interval workouts are created using a custom work, rest and repeats format.

Work value can be time or distance, followed by a rest time and then the number of times this is repeated.

All intervals and splits are stored in memory once workout is completed.

### SET WORKOUT-FIXED INTERVAL-INTERVAL TIME/DISTANCE - EDIT WORKOUT - EDIT REST- EDIT REPS-OK

Example: 500m work x 1:30 rest x 4 reps



## 4. Memory/Rerow

Each completed workout is saved to the OTM memory.

The most recent 50 workouts are stored in memory, with the oldest workout by date deleted for each new one added.

The memory shows the workout summaries by date and the monthly totals.

Select a workout to view more detail of the saved workout.

In the view detail page, press OK to rerow the same time or distance.

### Viewing Options

Workout History by Date				
DATE	WORKOUT	RESULT	Av/500m	SPM
31/10/16	2000	6:00.0	1:51.2	32
28/10/16	20:00	3453	2:10.5	18
24/10/16	6000	25:32.1	1:54.1	20
20/10/16	10000	41:03.3	2:05.6	22
15/10/16	60:00	15987	1:53.6	18
13/10/16	45:00	11723	1:59.2	21
1/10/16	1000	3:04.1	1:32.1	33
25/9/16	500	1:48.6	1:48.6	28

Distance: 2000		Date: 11/11/16	
Total Time: 6:00.0		Time: 9:45am	
Av/500m: 1:30.0			
SPLIT	SPLIT TIME	TIME	SPM
500	1:31.3	1:31.3	30
1000	1:31.1	3:02.4	32
1500	1:30.9	4:33.3	35
2000	1:26.7	6:00.0	31

Monthly Totals		
SEPT	6:35:44	25,043m
AUG	1:25:16	10,312m
JUL	0:00:00	0m
JUN	4:13:52	12,432m
MAY	8:11:45	50,687m
APR	12:35:24	93,472m
MAR	3:25:49	15,025m
FEB	7:35:26	30,542m
JAN	8:55:31	60,255m
DEC	3:45:53	12,058m
NOV	5:25:23	42,021m
OCT	7:55:41	58,587m

Most Recent

Workout Detail

Monthly Totals

### Rerow a previous workout

Open a previously saved workout by selecting the view detail page, then press OK to rerow the same time or distance.

## 5. Care and Maintenance

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Always keep the OTM clean and dry and away from external elements such as extreme temperatures, salt air, damp air, water and dust. If stored or exposed to these elements, protect the monitor with a cover and remove batteries if not used regularly. Extreme kind of exposure will ultimately reduce the lifetime of the OTM.

Do not apply pressure to the display screen as this might cause it to crack or malfunction. If necessary, gently wipe the display screen with a soft cloth after use.

Check that the monitor arm and mounting bolts are tight so that the monitor cannot fall down onto the chain. Tighten if loose.

Be careful to not let go of the handle at the end of a workout as this might impact the OTM and cause unnecessary damage to the screen or housing. When finished the workout, always carefully place the handle back in the holder or rest against the chain post faring.

## 6. Troubleshooting

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If you are experiencing any issues with your OTM-2, please check the troubleshooting list below. If unable to fix or determine the cause of the issue contact Oartec or go to [www.oartec.com/dxserviceandsupport](http://www.oartec.com/dxserviceandsupport) for all troubleshooting procedures.

### **Monitor not working - no display**

Replace batteries - 2 x alkaline D cell

Check and clean battery compartment and terminals

### **Replaced Batteries - Monitor not working - no display**

Check battery quality or use by date - try another set

Contact Oartec for service or replacement under warranty

### **Monitor not working - numbers but no activity**

Check sensor cable is plugged in

Sensor test sequence (see below)

Replace sensor if sensor not working

### **Sensor Test Sequence Navigation**

MENU - INFORMATION - DRAG FACTOR - Press and hold DISP button.

Number field will appear in top right of display. Gently turn flywheel. If detecting pulses numbers will count up.

*More information contact Oartec at [info@oartec.com](mailto:info@oartec.com)*

*or visit our website [www.oartec.com](http://www.oartec.com)*