OVERVIEW OF PM2 OPERATION

Your Concept2 Indoor Rower is equipped with a PM2, the second generation of our electronic Performance Monitor. We have designed the PM2 to be as friendly as possible while making several powerful functions available to you.

There are three levels of operation:

- **LEVEL I** Automatic operation: Like the original PM, the PM2 has an automatic mode which will monitor your workout without requiring you to use any buttons at all. You will also find it very easy to use the DISPLAY button to change the output units displayed. (See page 2)

- **LEVEL II** Preset Workouts and Recall: To introduce more variety into your exercise program, you can set up four different kinds of workouts on the PM2: preset time duration, preset distance, timed intervals, and distance intervals. After you have finished a workout, you can use RECALL to view your performance. All Level II functions have labeled buttons. (See page 3)

- **LEVEL III** Extra Functions: Advanced users can take advantage of these extra functions: two odometers (resettable and non-resettable), splits to be measured and displayed during your workout at an interval of your choice; drag factor display; and PM2 self-test. Extra functions are activated using button combinations which are described on page 6.
**USING THE PERFORMANCE MONITOR (PM2)**

**LEVEL I. Automatic Operation**

**A. GETTING STARTED**

All you need to do is get on and row. The PM2 will automatically come on and begin to display information about your performance. Here is what the displays are showing:

- **Your ELAPSED TIME**: how long you have been rowing.
- **Your TOTAL OR CUMULATIVE OUTPUT** since you started rowing. This is displayed in a choice of 4 units:
  - **AVERAGE PACE**: what your average pace per 500 meters has been since you started.
  - **METERS**: the number of meters you have rowed since you started.
  - **CALORIES**: the approximate number of calories you have burned since you started.
  - **WATTS**: your average power output in watts since you started.
- **Your STROKE RATE** or cadence in Strokes per Minute (SPM) updated every stroke. Aim for somewhere between 20 and 30 spm.
- **Your OUTPUT FOR EACH STROKE**: how hard you pulled on the last stroke. This is displayed in a choice of three units:
  - **PACE/500 METERS**: how long it would take you to row 500 meters if you kept rowing at that same pace. The smaller the number, the faster you are going.
  - **CALORIES/HOUR**: the rate at which you were burning calories during the last stroke. It displays the approximate number of calories you would burn in an hour if you kept rowing at that pace. The larger the number, the faster you are going.
  - **WATTS**: the power you exerted during the last stroke, in watts. The larger the number, the faster you are going.

**B. DISPLAY OPTIONS**

Now try pressing the DISPLAY button. Each time you press it, the display changes, cycling through the choices shown at right.

- You can choose any of these displays to watch while you row.
- You can change the display any time during your workout.

**A WORD ABOUT CALORIES:**

Due to the differences in body weight and efficiency, calories on the PM2 are only an approximation of calories burned by the person rowing. The formula used in the PM2 is as follows:

\[
\text{Calories} = (4 \times \text{ave. watts}/1.1639) + 300 \text{ cal/hour} \times \text{time rowed (in hours)}.
\]

This formula assumes a person of 175 pounds (80 kg.) and a base rate of 300 cal/hour to move your body through the rowing motion at 30 strokes/minute.
LEVEL II. PRESET WORKOUTS & RECALL

A. Setting Up Workouts
It is easy to set up a variety of workouts on your PM2. Specifically, you can set up:

- A single work session of preset time duration.
- A timed interval workout (alternating work time and rest time).
- A single work session of preset distance.
- A distance interval workout (alternating work distance and rest time).

All of these types of workouts can be set up using these buttons:

- ON/OFF: Press this button to turn the PM2 on or off. The PM2 will come on automatically when you start to row and will turn itself off after four minutes of inactivity.
- RECALL: After you have finished a workout, you can use RECALL to view your performance.
- SET DIGITS: Press this button to move right to the next digit when setting time or distance for workouts.
- READY: Press this button when you have finished setting up your workout and are ready to row.
- DISPLAY: You can press this button at any time before, during or after your workout to change your choice of display units. These choices include:
  - average pace
  - projected meters or time
  - elapsed meters or time
  - watts & calories

Projected Finish Display: When you are rowing one of these pre-set workouts, you will have an additional display option in the lower left field: Projected Finish Time or Distance. If you are rowing a preset distance, this display will show your projected finish time if you keep up your present pace. If you are rowing a preset time, this display will show your projected finish distance if you keep up your present pace. To see Projected Finish, simply press the DISPLAY button to cycle through the options until the word “PROJ” is displayed above the time or distance.

B. Sample Workouts:
The sample workouts on these two pages are designed to help you become familiar with this capability of your PM2. We encourage you to set them up on your own PM2 as you read through the instructions. They are also good workouts to try once you have learned proper rowing technique and built up your time rowing on the Indoor Rower.
You are now ready to row. You may change display now, during or after your workout.
C. Using Recall

After you have finished a workout, you can use RECALL to view your performance during each split or interval of your workout.

The first press of the RECALL button displays the end of workout information for your workout. Each successive press of the RECALL button shows the next earlier split or interval until either the last split has been displayed or there is no more memory available (maximum storage is 20 splits or intervals). The word “SPLIT” will appear on the screen to indicate that you are viewing split information as opposed to end of workout information. Default splits are: two minutes for timed workouts and 500 meters for distance workouts. See next section to set custom splits.

NOTE: Your workout results will remain in the PM2 memory until another workout is started, even if the PM2 is turned off.

Tips:
- The button works the same as RECALL. It shows the next earlier split or interval.
- The button shows the next later split or interval.
- The DISPLAY button can be used during split recall to view splits in various units.
- Pressing REST during split recall shows splits in cumulative mode. This is indicated to the user by “CU” in the center display field. Press REST again to exit CU mode.
- HEART RATE box shows your heart rate at the end of that interval or split
- SPM box shows your average strokes per minute for the interval or split

RECALL DISPLAY CHART

<table>
<thead>
<tr>
<th>Type of Workout</th>
<th>Splits Taken</th>
<th>Recall Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>automatic count up mode</td>
<td>every two minutes (or custom split interval if set)</td>
<td>1800 24.4</td>
</tr>
<tr>
<td>preset timed workout</td>
<td>every two minutes (or custom split interval if set)</td>
<td>1800 26.7</td>
</tr>
<tr>
<td>preset distance workout</td>
<td>every 500 meters (or custom split interval if set)</td>
<td>2000 28.3</td>
</tr>
<tr>
<td>preset timed intervals</td>
<td>at end of each time interval</td>
<td>1000 26.2</td>
</tr>
<tr>
<td>preset distance intervals</td>
<td>at end of each distance interval</td>
<td>500 25.6</td>
</tr>
</tbody>
</table>
**LEVEL III. Extra Functions (for Advanced Users)**

All of the PM2 buttons except the ON/OFF button have extra functions which are activated when you press and hold down the READY button. These special functions include:

- **Two Odometers**: one is resettable (trip odometer) and one is not resettable.
- **Split Intervals**: you can set the PM2 to measure splits at intervals which you set. Each split will be saved for recall after you finish and can be displayed for six seconds while you row.
- **Drag Factor**: you can set the PM2 to display the drag factor which it calculates during the rundown of the flywheel.
- **PM2 Display Test**

### BUTTON SEQUENCES & DESCRIPTIONS OF EXTRA FUNCTIONS:

#### Splits

**Custom Splits (time)**

- Hold down READY
- then press TIME

To set a time interval for split measurement. Use the SET DIGITS buttons to set the split time. Then press READY when done. Note: your custom split interval will not be retained through a power down. Default value is two minutes.

**Splits On/Off**

- Hold down READY
- then press RECALL

To have splits displayed during your workout. Repeating this button sequence will turn off the split display during your workout. When the PM2 powers up, splits are off by default.

#### Drag Factor

- Hold down READY
- then press DRAG FACTOR

To have a drag factor displayed in the lower right display window. Repeating this button sequence will turn off the drag factor display. The drag factor is most helpful if you row on Concept2 Indoor Rowers in different locations and want to be sure the resistance setting is the same. Check the drag factor on your “home” machine, and then adjust the damper on the “away” machine until you get the same drag factor. Typical range for drag factor on the Indoor Rower is: 103 (damper setting 1)-223 (damper setting 10). When PM2 powers up or resets, the drag factor display will be off by default.

Note: When a heart rate monitor is being worn, HR will override the drag factor and will always be displayed.

#### Two Odometers

**Not Resettable**

- Hold down READY
- then press TWO ODOMETERS

To display cumulative distance rowed. This odometer is not resettable. Distance is in kilometers and is only displayed when READY and Meters are being pressed.

**Resettable**

- Hold down READY
- then press TWO ODOMETERS

To display a resettable record of distance rowed. At 99,999 it rolls over to 0,000. Press RECALL to reset to 0. Press READY or ON/OFF to get out of this function.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
THE OPTIONAL PM2 HEART RATE INTERFACE

Installing on Model B

1. If signal is not picked up, place the receiver on the floor under the middle of the monorail.

2.

3.

4.

5.

6.

7.
THE OPTIONAL PM2 HEART RATE INTERFACE

Installing on Model C

1. OFF

2.

3.

4.

5.

6.

7.

Note for storage: Before you disconnect monorail from front end, remove receiver from VELCRO© patch and remove cable from framelock area.


For machines built before 7-1-95

For machines built after 7-1-95

Route wire through framelock.

21'/53 cm
How To Wear Your POLAR™ (or POLAR compatible) Heart Rate Monitor

Precautions
- Thoroughly wipe your Polar Belt Transmitter dry after each use.
- Do not store in a non-breathable or plastic bag where moisture may become trapped. Store in a warm dry place.
- Do not expose your HRM to direct sunlight, extreme heat above 50˚ Celsius (122˚ Fahrenheit) or extreme cold below -10˚ Celsius (14˚ Fahrenheit).
- Do not bend or stretch the electrode strips on your Belt Transmitter, especially when storing.

Troubleshooting
What if the heart rate reading is erratic or totally absent?

NOTE: Occasionally the Heart Rate Monitor will pick up bad data for a number of reasons. When the PM2 recognizes bad data, the display will go blank rather than show the bad data. It will take five seconds or longer to re-establish and display accurate readings.

1. Repeat the electrode wetting procedure as described above. The electrodes must be wet to pick up accurate heart rate readings.
2. Make sure the transmitter is centered with electrodes flat against your skin, as high under the Pectoral Muscles (breasts) as is comfortable.
3. Wash your belt transmitter with mild soap and water, if you have not been doing so regularly.
4. Make sure your Receiver is within the proper range to receive transmission (1 meter/3 feet from your chest belt).
5. Check the connection on the back of the PM2 where the receiver cable plugs in. Check the connection between the cable and the receiver.
6. If you are exercising within range of strong electro-

magnetic signals the heart rate readings may elevate to abnormal levels. Common sources of electromagnetic signals are televisions, computers, cars, TV antennas, high voltage power lines and motor driven exercise equipment.

7. Signals from more than one Belt Transmitter within the transmission range (1 meter/3 feet) may also cause incorrect readings. Check your surroundings and move away from the source of interference if possible.

NOTE: Two Indoor Rowers with Heart Rate hardware must be at least four feet (1.22 meters) apart to avoid interference.

If further troubleshooting assistance is needed, call Concept2 at 1.800.245.5676.
Exercise Duration and Frequency

Fitness experts advise that workouts should last approximately 30 to 40 minutes and be done at least three times a week. Your workouts should be spread throughout the week to let your body recover properly. Polar heart rate monitors guide you through your workout giving you continuous ECG-accurate heart rate readings.

Target Zone Exercise Pattern (40-year-old person)

Begin each workout slowly and give your body a chance to warm up at least five minutes below your target zone. Gradually increase the intensity of your exercise until you are in your target zone. Remain in your target zone for 20 to 30 minutes. Gradually reduce the intensity of your exercise and let your heart rate fall below your target zone with a five minute cool down period.
NOTE: Any service done by a party other than Polar Electro Inc. or a Polar authorized service center during the warranty period voids the warranty.

The Belt Transmitter consists of an elastic chest belt and **integral molded transmitter** with electrodes which automatically activates when properly wetted and secured around your chest. The transmitter will shut off automatically when removed, however, sweat and moisture can keep the Belt Transmitter activated so it is important to wipe it dry after each use.

Clean the Belt Transmitter with mild soap and water regularly to remove any perspiration residue. Do not use abrasives or chemicals such as steel wool or alcohol in cleaning as they can cause permanent damage to the electrodes.

Belt Transmitter Battery: The estimated battery life is 2500 hours of use. When your Belt Transmitter Battery is depleted, contact Polar Electro Inc. or a Polar Electro Inc. authorized service center to obtain a replacement.

<table>
<thead>
<tr>
<th>Limited One Year Warranty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-commercial Applications</strong></td>
</tr>
<tr>
<td>Polar Electro, Inc. warrants to the original consumer that the product will be free from defect in material or workmanship from the period of date of purchase indicated below:</td>
</tr>
<tr>
<td>• One piece (inclusive of battery) waterproof Transmitter/Belt (PE40) —— 2 years or 2500 hrs.</td>
</tr>
<tr>
<td>• Plug in Receiver ------------------------------- 1 year</td>
</tr>
</tbody>
</table>

**Commercial Applications**
Polar warrants to the original consumer that the products will be free from defect in material or workmanship for 90 days from the date of purchase.