



CARDIOsport®

Gym Bike console – ZM8 datasheet



Features:

- ANT+ interoperable 2.4Ghz wireless technology
- Best-in-class interference immunity
- Low Power consumption for long battery life
- Code memory during battery replacement
- Triple data display; Cadence, Heart Rate and Training Data
- Automatic Scan function
- Advanced energy expenditure algorithm for personalized Kcals (Calories)
- Bright Electroluminescent LCD screen light
- ANT+ heart rate receiver included(Model:ZM8). Or option is Dual mode ANT+ and heritage 5.3Khz analogue heart rate receiver included(Model: ZM8K)

On screen information:

- Cadence RPM; Current & session average
- Heart Rate; Current, session average and % of maximum heart rate
- Training data; Exercise session time and equivalent distance traveled
- Personalized session Kcals (Calories)
- Console Low battery indicator

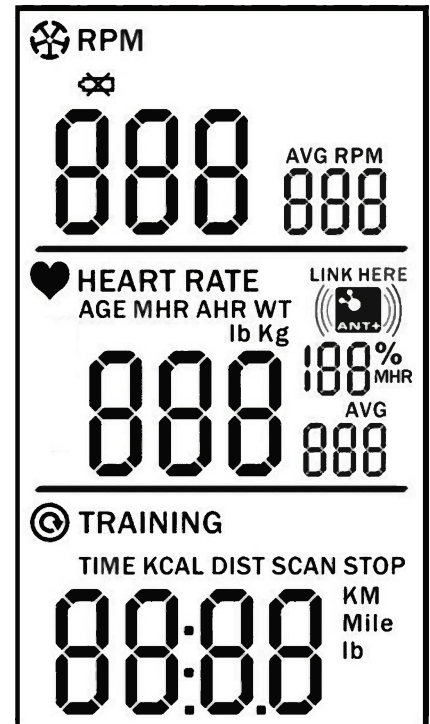


CARDIOSport®

Gym Bike console – ZM8 datasheet

Operating Overview:

1. From sleep mode press any key to wake up
2. Press "▶|▲" to start/pause workout
3. During workout you can see Current RPM, Average RPM, Current Heart Rate, Average Heart Rate, Heart Rate Intensity (% Max HR) in the top two screens plus user selectable data in the Training screen
4. Press "≈" to change data shown in Training screen during exercise (Time, Distance or Scan)
5. For setting Mode: Long press "✱"
Adjust values using up/down keys "▶|▲", "◀|▼"
 - a. Heart Rate Pairing: Press "≈" for heart rate pairing, you must put on the heart rate chest belt and move to within 12 inches (30cm) to the console for proximity pairing.
 - b. Press "✱" to set Age (or MHR if known)
 - c. Press "✱" to end setting Mode



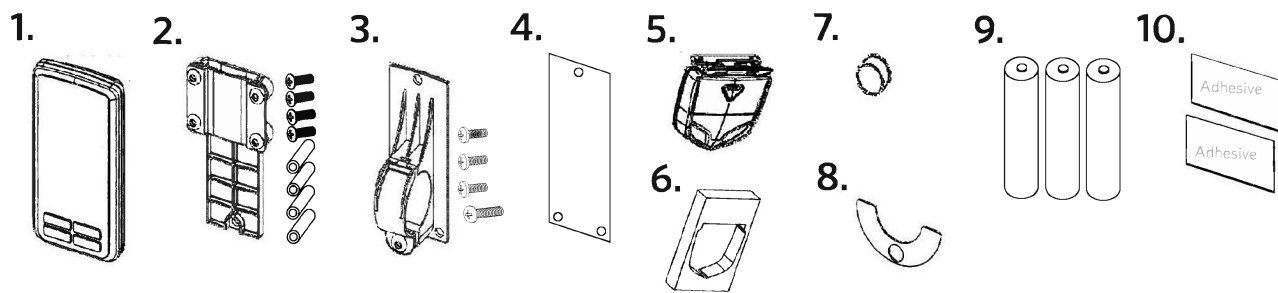
General:

1. ZM8 uses ANT+ 2,4Ghz wireless radio to transmit data
2. For heart rate an ANT+ heart rate chest belt accessory is available (Model: ZM8). Or option is for heart rate an ANT+ and 5.3k heart rate chest belt accessory is available (Model: ZM8K).
3. A flywheel sensor measures rotation, the gear ratio default setting is 2.9; with wheel size 27 inches
4. A maintenance mode is available to change default settings
5. The ANT+ flywheel sensor (included) needs to be mounted to the bike frame
6. The console operates from 3x AAA batteries, the flywheel sensor from a single CR2032 lithium coin cell battery

Technical Support

Healthcare Technology Limited
Dragoon House, Hussar Court, Waterloooville, PO7 7SF United Kingdom
Tel: +44 (0)23 9225 7388 - Email: HQ@cardiosport.com

Unpack the Box



The console box contains components for mounting the console on different bike models. Most current bikes use the flat mount bracket (2).

Each console ships with the following parts:

1. Console
2. Flat mount bracket (includes four screws and four spacers)
3. Ring mount bracket (includes four screws)
4. Rubber gasket inlay
5. Cadence sensor
6. Cadence sensor foam holder
7. Magnet
8. Adhesive magnet-holding shim
9. AAA batteries (three) for console
10. Double-stick adhesive pads for sensor mounting

Required Tools

- Phillips head screwdriver
- Hex key (5 mm)

Batteries Required

- Console: three AAA batteries (included)
- Cadence sensor: one CR2032 lithium coin cell battery (included)

Console Features

Console Features

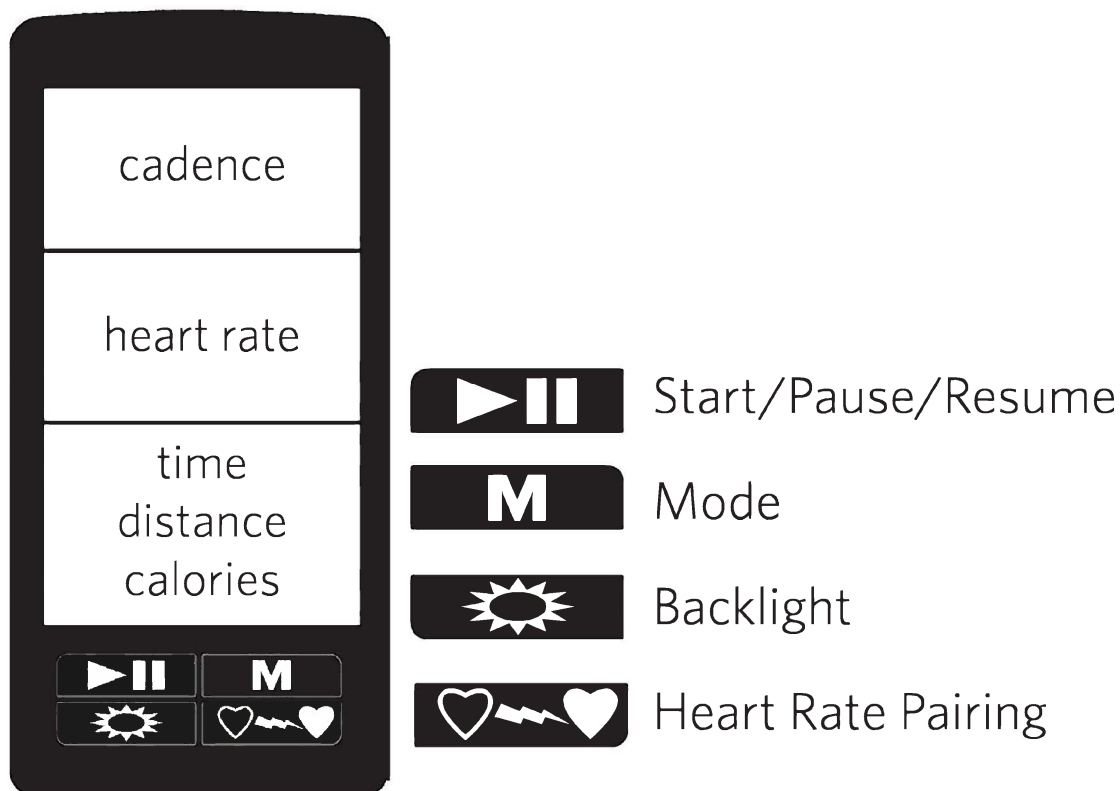
- ANT+™ interoperable 2.4Ghz wireless technology
- Low power consumption for long battery life
- Code memory during battery displacement and replacement
- Large three line display: Cadence, Heart rate and Training data
- Bright LED backlight
- Low battery indicator

User Metrics

- Customize units of measure: metric or imperial
- **RPM (revolutions per minute):** Measures pedal strokes per minute. The average RPM is calculated over a single workout.
- **BPM (beats per minute):** Measures heart beats per minute. The average BPM is calculated over a single workout.
- **Time:** During a workout, time displays in minutes:seconds. After 60 minutes, it displays in hours: minutes.
- **Distance:** Calculations are based on RPM.
- **Energy:** KiloCalorie calculations are based on heart rate.

Console Setup

The Spinning® Studio Console features a large, clear display and simple four-button layout.



The console and cadence sensor pair right out of the box. Check the four-digit code on the back of the console and cadence sensor (Figure 1) to make sure they match. Once confirmed, insert the three batteries into the console.



Figure 1

Cadence Sensor Installation

The Spinning® Studio Console tracks your cadence (measured in RPM) and distance. To track this information, you must attach the cadence sensor to the Spinner® bike.

To mount the magnet on a Precor Spinning bike:

1. Using a clean cloth, wipe the inside of the crank arm and magnet pocket (Figure 2) to remove dust or dirt.
2. Place the magnet into the magnet pocket and secure it using the magnet-holding shim.



Figure 2

To install the sensor:

1. Lock the flywheel and pedals by turning the resistance knob clockwise.
2. Remove the cover by removing the four screws (Figure 3).

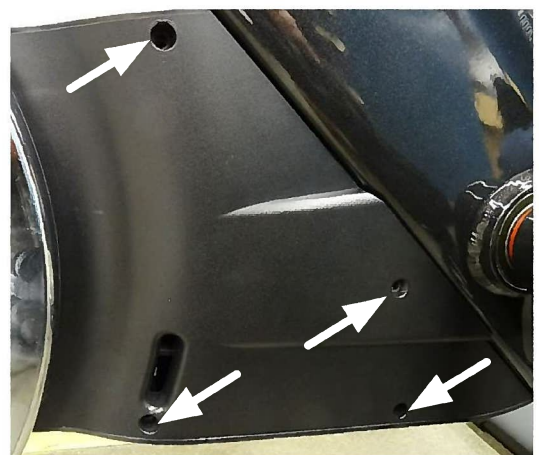


Figure 3

-
3. Press the cadence sensor into the foam holder (Figure 4).
 4. Press a strip of double stick adhesive to the back of the cadence sensor and foam holder to cover the battery access cap.
 5. Gently press the cadence sensor and foam holder into the designated sensor holder (Figure 5).



Figure 4



Figure 5

Test the cadence sensor synchronization using the following procedure.

To check the synchronization and complete installation:

1. Press the **Reset** button on the sensor (Figure 6).
2. Loosen the resistance knob, mount the bike, and begin pedaling.
3. On the console, verify that the rotating rate is correct.
Note A green light will flash on the sensor to confirm synchronization between the sensor and magnet. If the sensor does not sync, refer to *Customize Console Settings*.
4. Reattach the cover.



Figure 6

Pairing with your Heart Rate Belt

ANT+ compatible heart rate belts work with this console, and pairing to an ANT+ belt prevents any heart rate “crosstalk”.

Analog 5.3 KHz heart rate belts such as Polar® Wearlink™ also pair with the this console.

Important *Precor recommends testing both types of heart rate belts with the console to ensure it functions properly with each type.*

To pair the console with your heart rate belt:

1. Start your ANT+ compatible HR belt signal or analog 5.3 KHz heart rate simulator or belt.
2. Press **Mode**.
The heart rate information displays on the screen.
3. Press **Heart Rate Pairing** for automatic pairing with your heart rate signal.

Note When pairing, the words LINK HERE appear above the ANT symbol.

For ANT+ products: The heart rate belt must be within 30 cm (12 inches) of the console for pairing.

-
4. When pairing is successful:

ANT+ products: A four digit code displays on the screen.

For other 5.3 KHz heart rate belts: Four zeros display on the screen.

5. Press **Heart Rate Pairing** again to return to the workout mode.

As you pedal, the console displays information on your heart rate, cadence, time, distance and calories. After successfully pairing the console with your heart rate belt, you are ready to customize your settings or attach the console to your bike.

If you have difficulty pairing your heart rate belt to the console, please refer to *Frequently Asked Questions*.

Customize Console Settings

Use these settings to customize the console display or, if necessary, to re-pair the cadence sensor with the console.

Important To enter the settings mode, you must press and hold **Mode** as you install the third battery into the console.

The keys on the console are used as labeled by users, but function differently when setting up the console.

Key Function during setup

- S** Start/Pause/Resume button
- LS** Long press Start/Pause/Resume button
- M** Mode Button
- LM** Long press Mode Button
- B** Backlight Button (increase number in code setting)
- P** Heart Rate Pairing (decrease number in code setting)

To customize the console settings or re-pair the cadence sensor with the console:

1. As you install the third battery into the console, press and hold **Mode** until the screen displays all 8s.
2. Press **Mode** again to display the cadence information screen.

If you need to re-pair the cadence sensor, continue with Step 3. If your cadence sensor is paired properly, press **Mode** to continue setup and move to next section.

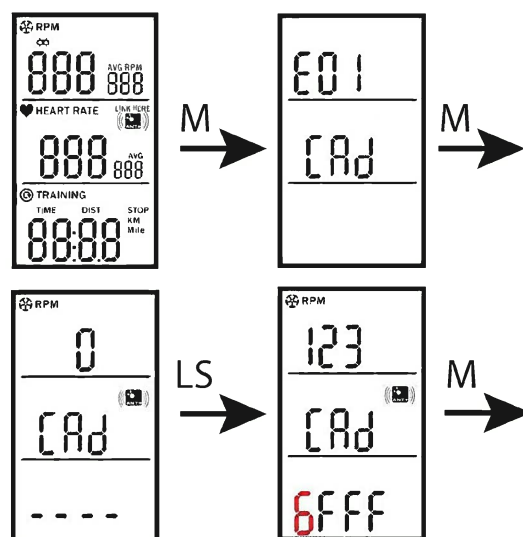


Figure 7

3. Press **Mode** again to display the code entry screen.
4. Hold **Start/Pause/Resume** until the first number or letter at the bottom of the screen begins flashing.
5. Enter the four digit code on the cadence sensor using **Backlight** to scroll up through each number and letter.
6. Press **Mode** to enter your selection and proceed to the next digit.
7. When all four numbers or letters have been entered into the console, press **Mode** to save and return to the cadence information screen.

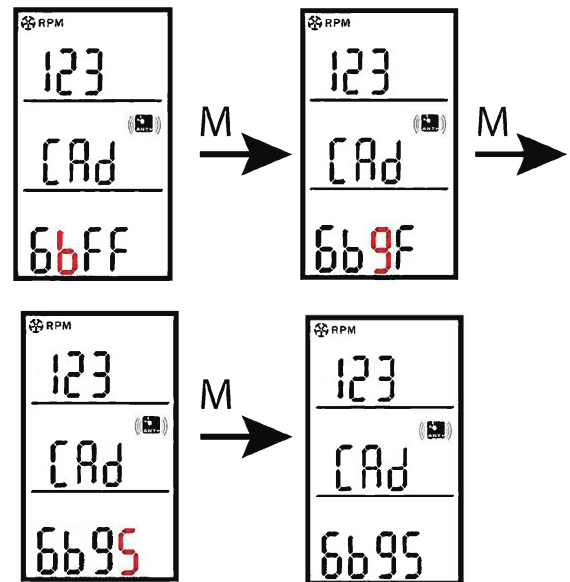


Figure 8

To change the units of measure:

1. On the console, press **Heart Rate Pairing** to display the units of measure (Figure 9).
2. Press **Mode** to select unit of measure. (Km or Miles). The back light adjustment screen now displays.

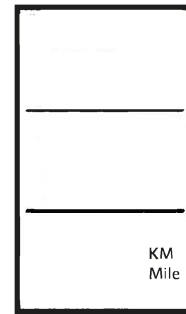


Figure 9

Backlight Time Adjustment

Increasing the amount of time the backlight stays on will diminish battery life. The default setting for the backlight time on the console is 5 seconds.

To adjust the length of time the backlight remains on after use:

1. On the cadence information screen, the LCD display will appear with a time.
2. Press **Backlight** to increase the time or **Heart Rate Pairing** to decrease the time. You can also select **OFF**.
3. Press **Mode** to select time and return to workout mode.

Attach the Console to the Bike

Before attaching your Spinning® Studio Console to your Spinner® bike, make sure that the console is pairing properly with your cadence sensor and heart rate transmitter.

To attach the console to the bike:

1. Place the rubber gasket inlay behind the console (Figure 10).
2. Select the flat bracket and secure it to the back of the console with the three screws (Figure 11).

Note Older bike models may require a different console mounting bracket. Choose the one appropriate for your bike.

3. Mount the console and bracket assembly just above the handlebars using four screws and four spacers. See Figure 13 for **newer** bike models and Figure 14 for older bike models.



Figure 10



Figure 11



Figure 12

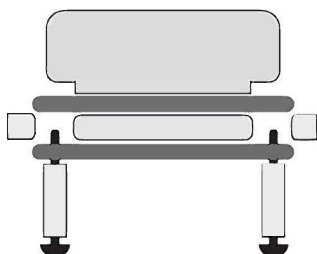


Figure 13

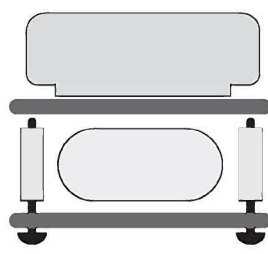


Figure 14

Console Care

Precor strongly recommends performing regular maintenance to ensure the console performs accurately.

Important *It is the duty of the owner to maintain equipment in accordance with the instructions in this material and any accompanying material. Always purchase replacement parts and hardware from Precor. If you use parts not approved by Precor, you could void the Precor Limited Warranty. Use of parts not approved by Precor may cause injury.*

Follow these recommended procedures:

Daily:

- After each use, wipe down the console using a soft cloth moistened with a mild soap solution in a 30:1 water-to-cleaner ratio. Spray the solution onto a soft cloth and then wipe the console.
- Never spray liquids directly onto the console or use abrasive cloths, oil, ammonia, or alcohol-based cleaners.

Weekly:

- Inspect each console for loose parts, bolts and nuts, adjust and tighten loose hardware as needed.
- Remove any consoles that are damaged, not properly mounted, or at risk of coming loose.

Monthly:

- Inspect all parts for damage and replace parts as required.
- Inspect mounting of the cadence sensor and magnet to ensure it is intact and working properly.
- A “low battery” indicator displays when batteries need replacing. Replace the batteries in the console with 3 high-quality AAA alkaline batteries.

Frequently Asked Questions

Which heart rate belts work with the Spinning® Studio Console?

Any ANT+ compatible heart rate belt will work with this console, and pairing to an ANT+ belt will prevent any heart rate “crosstalk”. Any analog 5.3 KHz heart rate belt such as Polar® Wearlink™ will also pair with the this console. We recommend the **Spinning Connect™** heart rate belt, as it will pair with this console as well as BLE-receiving smart phones.

What if the console is not picking up my heart rate?

- Make sure that the belt fits securely at the bottom of your ribcage and that the sensors are slightly moistened.
- The battery in the belt may be low. Try another strap or replace the battery/batteries inside your heart rate belt to facilitate pairing.
- Try using the Heart Rate Pairing button in the lower left for manual pairing with the console. For ANT+ chest straps, the displayed code will be alphanumeric. For analog belts, the code will be 4-digits and displayed as 0000.
- Check your distance from the console during syncing. Make sure you are 30 cm (12 inches) or less from the console.
- Press **Heart Rate Pairing** to start a new pairing process and delete the existing relationship. If the process does not complete, the previous pairing relationship will be lost.

What if I am picking up another rider's heart rate?

If bikes and riders are close enough together while wearing analog heart rate belts, it is possible to have "crosstalk" wherein the heart rate signal from another rider displays on an adjacent console. Using ANT+ compatible belts prevents this problem, but if this problem persists, try moving the bikes further apart to prevent "crosstalk." The initial close proximity heart rate pairing to each individual console is an important step in preventing "crosstalk".

What batteries work in the console and cadence sensor?

The console requires three AAA batteries. The cadence sensor requires one CR2032 lithium coin cell battery.

What is the best way to preserve battery life on the console?

Excessive use of the backlight will diminish battery life. Keeping the backlight off preserves battery life.

How do I clear the display after a ride?

The display turns off automatically after five minutes of inactivity.

To manually reset or clear your training data during or after a ride, press and hold **Start/Pause/Resume** for ten seconds.

Federal Communication Commission Interference Statement

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 of the following measures:

- . Reorient or relocate the receiving antenna.
- . Increase the separation between the equipment and 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.

FCC Caution: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 0.5 centimeters between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The antennas used for this transmitter must be installed to provide a separation distance of at least 0.5 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Trouble Shooting:

1. If ZM8/ZM8k crash or not work, please take AAA battery off. After 30 seconds, take AAA battery in correct position.