

V-MAX® Enduro-Plus Wristwatch User Guide

TABLE OF CONTENTS

HOW TO USE THIS MANUAL	1
WARNINGS & CAUTIONS	2
CARE & MAINTENANCE	3
WATCH FUNCTIONS	4
KEYS AND THEIR FUNCTIONS	5-6
QUICK START FOR CONTINUOUS HEART RATE	7
MAIN OPERATING MODES	8
SETTING TIME & DATE	9
SETTING USER PROFILE	10
SELECTING YOUR TARGET HEART RATE ZONE	11
SETTING YOUR TARGET HEART RATE ZONE	12
OPERATING HEART RATE/EXERCISE TIME MODE	13-14
VIEWING TIME & DATE	14
VIEWING THE BACKLIGHT SYSTEM	14



INTRODUCTION

HOW TO USE THIS MANUAL

This heart rate monitor has many unique features and functions. Before using it in the field, please read all sections of the manual carefully to become completely familiar with its operation.

The manual is divided into sections outlining how to program and operate the monitor. An illustration of the display screen that represents the starting point or other important screens for different programming or operational processes are shown next to the instructions. The corresponding keys are shown indicating **PRESS & HOLD** and **PRESS**.

This heart rate monitor is a sensitive, technical piece of equipment. It will last for many years with proper care and maintenance, but improper handling can cause the various sensors to be damaged and to stop functioning.

Proper setup and operation will greatly enhance the monitor's usefulness and your enjoyment.

CARE & MAINTENANCE

- **NEVER** attempt to disassemble or service your unit.
- **DO NOT** expose the unit to extreme heat, shocks, magnetic fields, electrical noise, strong vibration or long-term exposure to direct sunlight.
- **DO NOT** drop or step on the watch.
- **TO CLEAN THE UNIT:** wipe with a lightly moistened cloth. Apply mild soap to the area if there are stubborn stains or marks.
- **DO NOT** expose the unit to strong chemicals such as gasoline, cleaning solvents, acetone, alcohol or insect repellents, as they may damage the unit's seal, case and/or finish.
- **STORE** the unit in a dry place when not in use.

TABLE OF CONTENTS

SETTING DAILY ALARM	15
OPERATING THE CHRONOGRAPH	16
SETTING THE COUNTDOWN TIMER	17
OPERATING THE COUNTDOWN TIMER	18
REPLACING THE WATCH BATTERY	19
REPLACING THE CHEST TRANSMITTER BATTERY	20
TROUBLESHOOTING	21
RANGES & SPECIFICATIONS	22
WARRANTY	23

Series A Heart Rate Monitor

WARNINGS & CAUTIONS

WARNING: Before starting any exercise program or performing any vigorous physical activity, we strongly suggest you visit your doctor for a complete physical and to discuss your plans.

CAUTION: Your watch is designed to be water resistant to a static pressure of 5 ATM and can be worn while showering and light swimming. However, we recommend that extensive use of the unit in the water be avoided whenever possible. Care should be taken not to press any keys while the unit is submerged as this can force moisture past the key seals and damage the unit.

CAUTION: Avoid rough usage or severe impacts to the monitor.

DO NOT use hand cream or lotion as it will insulate the signal between the skin and sensor contacts.

CLEAN the monitor occasionally by using a damp cloth. Then wipe dry to remove any residual grease or film.

Series A Heart Rate Monitor

WATCH FUNCTIONS

TIME	CHRONOGRAPH
• Time/Day/Date/Month	• 1/100 second resolution
• 12- or 24-hour format	• 99 hours, 59 minutes, 59.99 seconds
• Daily Alarm	• Current Split display
• Hourly Chime	
HEART RATE	COUNTDOWN TIMER
• Chest Strap Transmitter HR acquisition	• 1-second resolution
• User-selected HR Zone	• Range: 99 hours, 59 minutes, 59.99 seconds
• HR Zone Alert	• Audible alarm
	OTHER
	• EL Backlight System

Series A Heart Rate Monitor

V-MAX® Enduro-Plus Wristwatch User Guide

KEYS AND THEIR FUNCTIONS

The monitor has four keys: MODE, RESET, STOP/START and EL/LIGHT. The following page lists the basic functions of each key.



5

QUICK START FOR HEART RATE

The Chest Strap Transmitter provides constant heart rate display throughout the duration of your workout. To ensure a proper heart rate display, the chest transmitter must be properly adjusted:

1. Fasten the watch on your wrist.
2. Connect the elastic belt to the transmitter unit and secure around your chest.
3. Adjust the strap so that the transmitter fits snug (but not constricting) below the pectoral muscles.
4. Position the electrodes, as shown in the drawing.
5. **PRESS** the **MODE** key to advance to Heart Rate/Chronograph mode.
6. **PRESS** the **START/STOP** key. The watch will search for heart rate signal.
7. Heart rate will display in center display line.



7

SETTING TIME AND DATE

1. In Time mode, **PRESS & HOLD** the **MODE** key to enter the programming sequence. The variable being adjusted will flash on and off.
2. Reset Seconds to zero (00) by **PRESSING** the **START/STOP (S/S)** or **RESET (R)** key. Advance to Set Minutes by **PRESSING MODE**.
3. Adjust Minutes by **PRESSING START/STOP** (to increase) or **RESET** (to decrease). Set Minutes and advance to Set Hour by **PRESSING MODE**.
4. Adjust Hour by **PRESSING S/S** or **R**. Set Hour and advance to Set Year by **PRESSING MODE**.
5. Adjust Year by **PRESSING S/S** or **R**. Set by **PRESSING MODE**.
6. Adjust Month by **PRESSING S/S** or **R**. Set by **PRESSING MODE**.
7. Adjust Day by **PRESSING S/S** or **R**. Set by **PRESSING MODE**.
8. Adjust Date format (Month-Day or Day-Month) by **PRESSING S/S** or **R**. Set Format by **PRESSING MODE**.
9. Adjust 12/24-hour format by **PRESSING S/S** or **R**. Set Format by **PRESSING MODE**.
10. Turn Key Beep ON or OFF by **PRESSING S/S** or **R**. Set by **PRESSING MODE**.

CONTINUED ON NEXT PAGE

9

KEYS AND THEIR FUNCTIONS

MODE KEY

- Scroll through operating modes
- **PRESS & HOLD**: Enter/Exit the programming sequence
- Set values being adjusted in programming sequence

START/STOP KEY (S/S)

- Access Date display in Time mode
- Turn Alarm ON or OFF in Alarm mode
- Start/Stop Countdown Timer
- Start/Stop Chronograph
- Start/Stop in Heart Rate/Exercise Time mode
- Increase setting values being adjusted in programming sequence

RESET KEY (R)

- Enter/Exit Heart Rate mode in Time of Day mode
- **PRESS & HOLD**: Reset Chronograph, Countdown Timer and Exercise Time
- Decrease setting values being adjusted in programming sequence
- Scroll through sub modes in Heart Rate mode

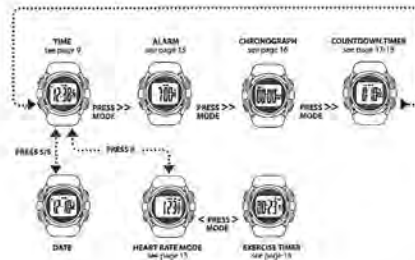
EL/LIGHT KEY

- Activate (EL) backlight system

Series A Heart Rate Monitor

MAIN OPERATING MODES

1. Scroll through Time, Alarm, Chronograph and Countdown Timer modes by pressing the Mode key.
2. View Date by **PRESSING** the **START/STOP** key in Time mode.
3. Access Heart Rate mode by **PRESSING** the **RESET** key in Time mode.



Series A Heart Rate Monitor

SETTING USER PROFILE

This monitor uses information based on your Age to estimate your maximum heart rate and to calculate other heart rate information. This information must be programmed in the Programming Sequence to ensure accuracy of the watch's advanced functions.

11. Adjust Year of Birth by **PRESSING S/S** or **R**. Set by **PRESSING MODE**.
12. Adjust Month of Birth by **PRESSING S/S** or **R**. Set by **PRESSING MODE**.
13. Adjust Day of Birth by **PRESSING S/S** or **R**. Set by **PRESSING MODE**.
14. **PRESS & HOLD** the Mode key to exit the Programming Sequence & resume Operating mode.

KEY SEQUENCE:



Series A Heart Rate Monitor

V-MAX® Enduro-Plus Wristwatch User Guide

SELECTING YOUR TARGET HEART RATE ZONE

The monitor allows you to program a single Target Heart Rate Zone and alerts you when your heart rate is above or below the assigned range.

The Target Heart Rate Zone can be established using either Beats per Minute or Percentage of Maximum Heart Rate (MHR). Beats per Minute is the most common means of setting Target Heart Rate Zone and requires the user to set specific heart rate numbers for the upper and lower limits of the range. Some coaches and exercise systems use Percentage of MHR as the basis for Target Zones. The monitor also can automatically program a Target Zone based on the user's age.

The following are sample ranges of Target Heart Rate Zones:

Health Zone – Range: 50% - 65% of maximum heart rate (MHR): For fitness beginners on a low to moderate intensity program.

Fat Burning Zone – Range: 65% - 75% of MHR: Most calories burned are recruited from fats. Strengthens the cardiovascular system.

Aerobic Zone – Range: 75% - 85% of MHR: Requires more intense aerobic activity and burns maximum calories from fat and carbohydrates. Increased metabolism and elevated caloric burn are the primary benefits.

11

OPERATING HEART RATE/EXERCISE TIME MODE

The monitor displays heart rate in both beats per minute and % of maximum heart rate and is equipped with a 10-hour Exercise Chronograph in 1-second resolution that tracks exercise time. You may toggle between Heart Rate display and Exercise Timer by **PRESSING** the **MODE** key in Heart Rate Mode.

1. In Time mode, **PRESS RESET (R)** key to access Heart Rate mode.

NOTE: You must be wearing the transmitter strap to acquire heart rate.

2. The display will show a dashed line (---). To acquire Heart Rate, **PRESS S/S**. The dashed line will flash until heart rate is acquired.
3. When heart rate is acquired, the monitor will display in both beats per minute and % of estimated maximum heart rate. Exercise timer will automatically **START** timing.

TIP: If Zone Alert is ON, audible and visual alerts will indicate if you are above or below Target Heart Rate Zone.

4. To view Exercise Timer, **PRESS MODE**. Toggle between Heart Rate and Exercise Timer by **PRESSING MODE**.
5. To **STOP** timing, **PRESS S/S**.

NOTE: You will need to reacquire heart rate to resume timing.

6. To **RESET** the Chronograph to zero, **PRESS & HOLD R**.

NOTE: **PRESS** the **RESET** key at any time to exit Heart Rate mode and view Time of Day. Press **RESET** again to resume Heart Rate mode. Exercise Time will not be interrupted.

13

CONTINUED ON NEXT PAGE

SETTING DAILY ALARM

The monitor features a Daily Alarm. In Alarm mode:

1. Select Alarm ON or OFF by **PRESSING RESET (R)**. Turn Hourly Chime ON or OFF by **PRESSING STOP/START (S/S)**.
2. To set Alarm, **PRESS & HOLD MODE**.
3. Adjust Minutes by **PRESSING S/S** or **R**. Set by **PRESSING MODE**.
4. Adjust Hour by **PRESSING S/S** or **R**. Set by **PRESSING MODE**.
5. **PRESS & HOLD** the **MODE** key to exit the Programming Sequence and return to Alarm mode.

KEY SEQUENCE:



15

SETTING YOUR TARGET HEART RATE ZONE

The monitor automatically calculates your Maximum Heart Rate from your Age settings.

1. In Heart Rate/Chronograph mode, **PRESS & HOLD** the **MODE** key to enter the Programming Sequence.
2. Select Zone Alarms ON or OFF by **PRESSING S/S** or **R**. Set Zone Alarms by **PRESSING MODE**.

TIP: Zone Alarm is an audible/visual signal that sounds when you are above or below your selected Target heart Rate Zone.

3. Select basis for Target Zone (AGE, Hr or Hr%) by **PRESSING S/S** or **R**. Set by **PRESSING MODE**.

NOTE: If AGE is selected, the monitor will automatically program a Target Heart Rate Zone of 65% - 85% of estimated maximum heart rate.

4. Adjust Target Zone Lower Limit by **PRESSING S/S** or **R**. Set by **PRESSING MODE**.
5. Adjust Target Zone Upper Limit by **PRESSING S/S** or **R**. Set by **PRESSING MODE**.
6. **PRESS & HOLD** the **MODE** key to exit the Programming Sequence and return to Heart Rate mode.

Series A Heart Rate Monitor

HEART RATE MODE KEY SEQUENCE:



VIEWING TIME AND DATE

1. In Time mode, **PRESS** the **STOP/START (S/S)** key to view Date.
2. **PRESS** the **STOP/START** key to resume Time mode.



VIEWING THE BACKLIGHT SYSTEM

The monitor is equipped with an electroluminescent (EL) Backlight System for viewing the display in low light conditions.

To operate the Backlight System:

1. **PRESS** the **EL** key.
- NOTE:** excessive use of Backlight System may significantly reduce battery life.

Series A Heart Rate Monitor

OPERATING THE CHRONOGRAPH

The monitor is equipped with a 100-hour Chronograph. The Chronograph functions independently from the monitor's other timing features. To operate the Chronograph:

1. To **START** Timing, **PRESS START/STOP (S/S)**.
2. To View a Split, **PRESS RESET (R)**. The display will freeze. **PRESS R** again to resume elapsed time view (the monitor will automatically resume elapsed time display after approximately 10 seconds).
3. To **STOP** timing, **PRESS S/S**.
4. To **RESET** the Chronograph, **PRESS & HOLD** the **RESET (R)** key.

KEY SEQUENCE:



Series A Heart Rate Monitor

V-MAX® Enduro-Plus Wristwatch User Guide

SETTING THE COUNTDOWN TIMER

The monitor is equipped with a 100-hour Countdown Timer for timed interval workouts, etc. The Timer functions independently from the watch's other timing features. To set Timer:

1. **PRESS & HOLD** the **MODE** key in Timer mode.
2. Adjust Seconds by pressing **START/STOP (S/S)** or **RESET (R)**. Set by **PRESSING MODE**.
3. Adjust Minutes by pressing **START/STOP (S/S)** or **RESET (R)**. Set by **PRESSING MODE**.
4. Adjust Hours by pressing **START/STOP (S/S)** or **RESET (R)**. Set by **PRESSING MODE**.
5. **PRESS & HOLD** the **MODE** key to exit the Programming Sequence and return to Timer mode.

KEY SEQUENCE:



17

REPLACING THE WATCH BATTERY

Replacement Battery Size is CR2025

Battery replacement is required from time to time, and should occur when:

1. The display fades in part or completely
2. The heart rate function will not activate
3. Backlight System does not operate

To replace the battery: in order to ensure that the water resistance will be retained after battery replacement, it is recommended you take it to a watch repair service center or certified jeweler.

19

TROUBLESHOOTING

POTENTIAL CAUSES FOR NO HEART RATE READING OR LONG RESPONSE TIME:

CAUSE: Dry skin

SOLUTION: Apply conductive gel thoroughly to chest area. Tap water may help if conductive gel is not available.

CAUSE: Chest strap is not contacting with skin

SOLUTION: Make sure the chest strap is secured firmly just below the breast plate (see page 6) and the watch is fastened securely on wrist.

CAUSE: Dead skin on chest

SOLUTION: Rub off excessive dead skin with a towel

CAUSE: A thin layer of body grease insulates the ECG signal preventing the Chest Strap from detecting ECG heart rate

SOLUTION: Wipe chest and the back of Chest Strap with a tissue or soft towel.

CAUSE: Hairy Skin

SOLUTION: Apply conductive gel to chest area.

CAUSE: Low Battery

SOLUTION: Replace the battery in watch/transmitter.

CAUSE: electrical field interference from RF devices such as overhead power lines, electrical noise, etc.

SOLUTION: Leave the area where RF sources potentially exist.

21

OPERATING THE COUNTDOWN TIMER

To operate the Timer:

1. To **START** timing, **PRESS START/STOP (S/S)**.
2. To **STOP** timing, **PRESS S/S**.
3. To **RESET** the Timer, **PRESS RESET (R)** (timer must be **STOPPED** to RESET).

KEY SEQUENCE:

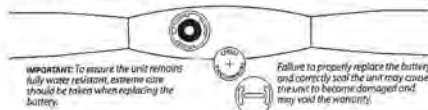


Series A Heart Rate Monitor

REPLACING THE CHEST TRANSMITTER BATTERY

This monitor features a wireless heart rate transmitter, powered by a CR2032 3v Lithium battery. Under normal conditions you can expect to get approximately 300-400 hours of heart rate transmitter use with a fresh battery. To replace the battery:

1. Using a coin, turn the battery door counter clockwise until the door comes free of the watch.
2. Take care not to damage the O-ring seal for the battery compartment and carefully remove the old battery.
3. Place a new battery in the battery compartment with the positive (+) side toward the battery door.
4. Place the battery door over the opening and tighten it down by using a coin and turning in a clockwise direction.
5. If the O-ring has been damaged, replace it before reinstalling the battery door. Most jewelers and watch shops should have replacement O-ring seals.



Series A Heart Rate Monitor

RANGES & SPECIFICATIONS

TIME

- AM, PM, hour, minute, second
- 12/24 hour format
- Calendar: month, date, day display with auto leap year adjustment

ALARM

- Daily alarm

CHRONOGRAPH

- Resolution: 1/100 second
- Measuring range: 99 hours, 59 minutes, 59.99 seconds
- Split times display

HEART RATE

- Range: 40-240 beats per minute

EXERCISE TIMER

- Resolution: 1 second
- Measuring Range: 9 hours, 59 minutes, 59 seconds

COUNTDOWN TIMER

- Resolution: 1 second
- Measuring Range: 99 hours, 59 minutes, 59 seconds

OTHER

- Electroluminescent (EL) backlight
- Water resistant up to 50 meters
- Battery: CR 2032

Series A Heart Rate Monitor

V-MAX® Enduro-Plus Wristwatch User Guide

WARRANTY

Your monitor is warranted for a period of **one (1) year** from the date of purchase from an authorized retailer.

If defective, return the monitor with the original receipt, or copy, to your original retailer or to Sports Beat, Inc. for a replacement monitor.

This warranty covers defects in materials and workmanship only. It does not cover the battery, damage due to abuse or misuse, accidents, or any commercial use.

Distributed by Sports Beat, Inc.
45 Jefryn Blvd. West, Deer Park, N.Y. 11729
Phone: **1 (888) 760 - 3059** / Fax: (631) 274 - 3033
Email: sportsbeat@sportsbeatny.com
www.sportsbeatusa.com