

HR427

ENGLISH



VETTA

ENGLISH

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CONGRATULATIONS!

Welcome to the future of wireless heart rate technology! Your purchase today shows that you are serious about your exercise and are committed to achieving your best. Today, getting the most from your exercise doesn't necessarily mean you have to spend longer periods of time to achieve those goals. With Target Heart Rate Training, you will increase the effectiveness of your workout by monitoring and quantifying your results every step of the way. For most individuals as little as 20 minutes in your target heart rate zone each session is enough to achieve substantial health improvements. The Vetta HR427 will act as your personal coach and guide you to your fitness goals more effectively.

Heart Rate Technology provided by Acumen, Inc. EZ Set Target Zone™ is a trademark of Acumen, Inc. EZ-Set Target Zone and Angled Belt Clip are patent pending from Acumen, Inc.

WARNINGS & CAUTIONS

Overexertion can cause serious injury, including heart attacks. Some individuals cannot safely elevate their heart rate to the levels of typically used heart rate training zones. No one should begin an exercise program without first obtaining medical clearance, especially if there is a personal or family history of heart disease, high blood pressure, or if you are over age 40, have diabetes, high cholesterol, smoke cigarettes, are overweight or are taking certain medications. Stop exercising and seek medical attention if you notice signs of overexertion or heart problems, such as pain or pressure in the left or mid-chest area or left neck, shoulder or arm, light-headedness, cold sweat, unusual paleness or fainting. Also note that the signals used by this monitor may interfere with a pacemaker or other implanted devices, consult the manufacturer of the implant device and/or your physician prior to using this monitor.

HR427 FEATURES

- Shock resistant design
- Water resistant to 30 meters
- Nite Site Electroluminescent Night Light
- EZ-Set Target Zone Automatic Programming
- Target Zone (TZ) audible and Visual Alarm Indicators
- Wireless, ECG accurate Heart Rate Chest Belt
- 12/24hr Time/Date display with Daily Alarm
- Quick Release Bike Mount Design
- Memory Recall of Time in Target Zone & Fitness Index

HR427 COMPONENTS:

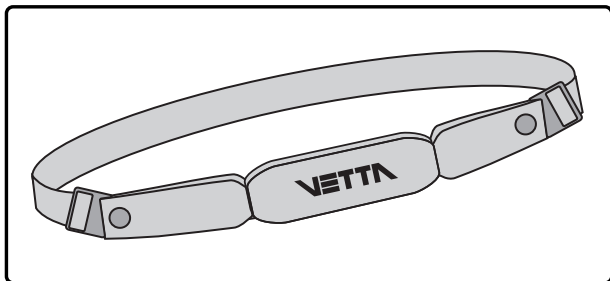
HEART RATE MONITOR

Sleek, sporty styling with an easy-to-read display and comfortable button locations.

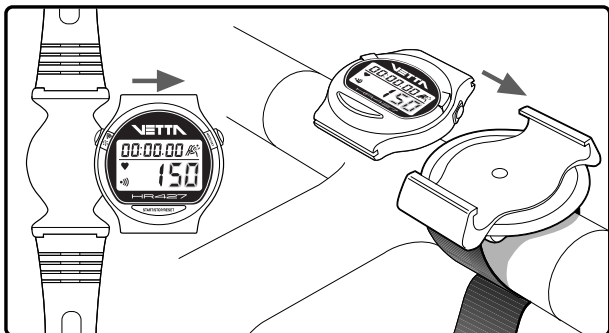


CHEST TRANSMITTER ADJUSTABLE ELASTIC STRAP WITH EZ-FIT BELT CLIPS

Soft, flexible electrodes comfortably hug your chest providing optimum stability. Elastic strap is easy to adjust and includes a unique angled design patented clip which helps eliminate slippage and provides added comfort.

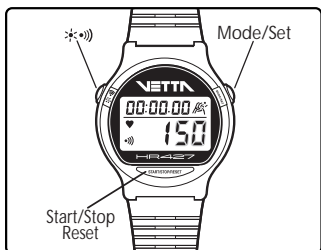


VETTA BIKE MOUNT



The head unit of the HR427 can be detached from the wrist strap mount and inserted into the handlebar mount as shown.

BUTTON FUNCTIONS

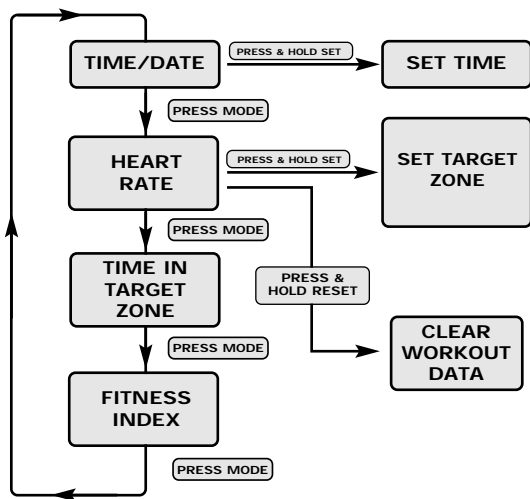


- **LIGHT * ALARM** Button Press momentarily to light display 3 seconds. Press and hold to keep light on longer & hold 3 seconds to toggle alarm ON/OFF for the current mode displayed.
- **MODE/SET** Button Press momentarily to change modes. Press & hold for SET.
- **START/STOP/RESET** Button Press momentarily for start/stop. Press and hold to reset stopwatch.

Note: All button produce a short beep when pressed. Press and hold commands also produce another beep.

MODES OF OPERATION

To switch through different modes, click the MODE button.



The two Setting modes-Clock and Target- are accessed from the Time of Day & HR/Stopwatch display modes.

- Press & hold the SET button to enter setting mode .
- Adjust blinking digits with the RESET or ALARM buttons.
- Press RESET button to increase the digits. Press ALARM to decrease the digits press and hold changes the digits fast.
- Proceed to the next setting option with the SET button.
- To exit Setting Mode when finished, just press and hold the SET button.

Note: If no button is pressed after 1 minute, the monitor will automatically exit the Setting Mode.

SETTING THE CLOCK/CALENDAR

Start from the Time-of-Day Mode.

1. Press & hold the SET button to enter the time setting mode.



2. Hour (blinking) -Set using the RESET or ALARM button. Press the SET button to proceed to the next item.



3. Minutes (blinking) -Set using the RESET or ALARM button. Press the SET button to proceed to the next item.



4. 12/24hr. Time Display(blinking) --Set using the RESET or ALARM button. Press the SET button to proceed to the next item.



5. Year (blinking) -Set using the RESET or ALARM button. Press the SET button to proceed to the next item.



6. Month (blinking) -Set using the RESET or ALARM button. Press the SET button to proceed to the next item.



7. Day (blinking) -Set using the RESET or ALARM button. Press the SET button to proceed to Alarm settings.



8. Daily Alarm (blinking) -Set on or off with the RESET or ALARM button. Press the SET button to proceed to the next item.



9. Alarm Hour (blinking) -Set using the RESET or ALARM button. Press the SET button to proceed to the next item.



10. Alarm Minutes (blinking) -Set using the RESET or ALARM button. Press the SET button to proceed to the next item.



11. Smart Lite (blinking) -Set on or off using the RESET or ALARM button. Press the SET button to exit the setting mode.



DETERMINING YOUR TARGET ZONE

What is Target Zone Heart Rate Training?

In order to benefit the most from your workout, you need to become familiar with your heart rate training zone. By working within the correct range, you will achieve your fitness goals and strengthen your cardiovascular system in less time. Here is basically how it works.

Effective conditioning requires that you maintain your heart rate at the proper level for at least 20 minutes per workout (or per day). At too high of a heart rate your activity can become counter effective. For most people, as your heart rate exceeds 85% (the upper limit), your body begins to become anaerobic and produce acids. This also burns less fat which can begin to burn and strain muscles, and even start storing fat.

As for the Lower limit, this number tells you when you have reached a level of intensity that is productive. A heart rate monitor will tune you into your body's internal activity level and helps prevent injury or worse.

To make this part easy for you, this monitor automatically sets the correct target zone for you, after you enter in your age in the heart rate setup mode. The internal auto-setting is based on a generally accepted standard range of 65 to 85% of your max HR (where max HR = 220 - Age).

There are many variations of formulas for calculating target zones. In most cases they will come up with a range very close to or the same as the auto-setting of this monitor. If you prefer to fine-tune or program your own limits, this can be done in the 2nd portion of the HR Setting Mode (see page 8). The internal automatic TZ calculation is based on the following example:

TARGET ZONE CALCULATION FORMULA

220 - Your Age = max HR
For a 30 year old person, your
calculations would be as follows:
220 - 30 = 190 Maximum Heart Rate
65% of this number = 123.5
85% of this number = 161.5

The calculated exercise range for a 30 year old would be a low of 124 and a high of 162 beats per minute. You should never exercise near your maximum heart rate (max HR) for any period of time.

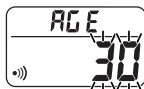
SETTING YOUR TARGET ZONE

Start from the Heart Rate Mode

1. Press & hold the SET button to enter the setting mode.



2. Age (blinking) --Set age using the RESET or ALARM button (Range is 7-99, default is 30). Press the SET button to proceed to the next item. (If you want to use the built-in EZ-Setting of 65-85% of your max, set only your age and skip steps 3, 4 & 5 by pressing SET 3 times.)



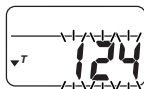
3. Target Zone Alarm (blinking) --Set ON/OFF using the RESET or ALARM button. Press the SET button to proceed to the next item.



4. Target Zone High (blinking) --Set using the RESET or ALARM button (TZ High auto-sets based on age setting, modifying it is optional.). Press the SET button to proceed to the next item.






5. Target Zone Low (blinking) --Set using the RESET or ALARM button (TZ Low also auto-sets based on age setting, modifying it is optional.). Press the SET button to exit setting mode.



Note: Any items not set will default to standard average values. The TZ limits automatically set to 65-85% of your max. based on your age setting (where Max. = 220 - Age) every time the age setting is changed. This watch will allow you to program your upper and lower limits within one beat of each other. It will also allow you to set either limit to the "off" position But it will not let you set the lower limit higher than the upper or the upper to less than the lower.

SETTING ALARM SOUND ON AND OFF

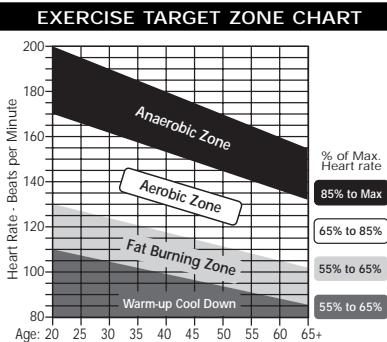
The alarm sound for both the Daily Alarm and the Target Zone Range can be turned ON or OFF by pressing and holding the ALARM  button. To indicate this, the alarm indicator  on the display will switch ON or OFF.

To switch the Daily Alarm ON or OFF, press and hold the  button while in the Time Mode. When this alarm is beeping it can be silenced by pressing any button.

To activate or deactivate the Target Zone Alarm Sound, simply press the **»»** button while in the Heart Rate/Stopwatch Mode.

BASIC FITNESS TIPS & TARGET ZONE

Depending on your specific goals, individual fitness level or just on how energetic you feel, you may want to modify your range from one day to the next based on the following chart:



STRETCHING

Begin and end every workout with stretching. Stretching done before your workout increases flexibility to help prevent muscle strain or injury and stretching after, loosens tight muscles and helps prevent soreness.

- Stretch before warm up & after cool down.
- Stretch slowly & gently, never bounce or stretch to a point of pain.
- Hold each stretch 30-60 sec. & exhale as you extend stretches.

WARM UP & COOL DOWN 55% OR LESS

Warm Up & Cool Down: 55% or less --Start every exercise with a slow and gradual warm up and end with a slow and gradual cool down. Smoothly easing into and out of strenuous activity helps your body prepare your metabolism and blood flow to efficiently break down fat and change over from one intensity level to another. Going into your target zone too quickly can cause your heart rate to increase too rapidly causing you to lose your energy too soon, strain yourself or possibly worse.

- Slowly bring your heart rate to a level just below the lower limit of your target zone.
- Maintain heart rate at this level for 5-10 min.

FAT BURNING ZONE: 55-65%

The Fat Burning Zone: 55-65% --This range is recommended for those who haven't worked out in a long time, are trying to lose weight, those at a high risk for heart problems or if you're just not feeling 100% one day. It is intended for low intensity and/or long duration exercise. The lower intensity helps you maintain your exercise for longer periods of time. When exercising for weight loss or starting a new exercise routine, longer duration is more important and much healthier than higher intensity.

- Build up gradually to 30 to 60 min. per workout.
- Workout 3 or 4 times per week.

THE AEROBIC ZONE 65%-85%

This range is recommended for those in good physical condition who have been exercising on a consistent basis for an extended period of time. Exercising at this range helps improve your fitness. This range is recommended for those in good physical condition who have been exercising on a constant basis for an extended period of time. Exercising at this range helps improve your fitness level and prevent injury caused from over training.

- Duration: 20-30 min. per workout.
- Frequency: At least 3 or 4 times per week.

THE ANAEROBIC ZONE: 85% TO MAX HR

To be used by ultra-athletes only and never recommended without close medical approval or supervision. This range is used only for those in extremely good physical condition during races or training for competition. It is typically used for interval training (or short sprints) to help improve or measure endurance levels.

MONITOR YOUR PROGRESS

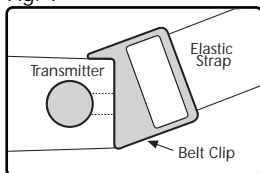
Track yourself to determine how your overall health and fitness improves and become aware of your various heart rate levels. As your cardiovascular system improves, your normal resting heart rate will decrease. It will take longer to reach your target zone, it will take less and less time for your heart rate to come back down after working out.

If you ever notice your resting heart rate to be higher than usual, it may be a good idea to take a rest from exercise, or at least workout easier that day, Similarly, if you notice that your heart rate doesn't come back down as quickly as usual at the end of your workout, it could be an indication that your workout was more (or too) strenuous, or that you haven't recovered well enough from a previous extraneous workout or injury. These signals in your heart rate could also be an indication of an illness coming on, stress, or a good reason for a check up with your doctor.

ATTACHING YOUR HEART MONITOR

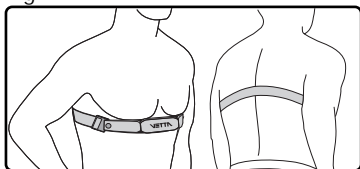
1. Attach the adjustable strap to one side of the transmitter. Push the round tab of the belt clip through the back side of the attaching hole on the transmitter and twist it into place (Fig. 1). The unique angled clip is designed to prevent the belt from slipping down your chest. It can be attached in either the up or down position (keeping both the same). Depending on the contour of your torso, one direction may be more comfortable than the other.

Fig. 1



2. Adjust the tension of the strap to fit snugly but comfortably around your chest. Wrap the belt around your chest as shown (Fig.2)

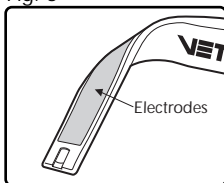
Fig. 2



3. Center and position the belt as shown, at heart level, just below your pectoral muscles or breasts (but not too low) and attach the other end of the strap to the transmitter. The "Vetta" logo should be positioned at the center of your chest.

4. Moisten the transmitter electrodes. For best results, the belt should be worn directly on your skin. A small amount of moisture is needed to assist in conducting the electrical impulses generated from your heart beats to the transmitter. Gently pull belt away from skin and apply a small drop of water or saline solution to each of the two electrodes (one on each side) (Fig. 3).

Fig. 3



If you prefer to wear your belt over a light shirt you will need to generously moisten the areas of the shirt directly beneath the electrodes in order to insure proper signal pick-up. You may wear as many layers of clothing as desired over the transmitter belt without affecting the operating range.

5. Put your wrist monitor on. The monitor doesn't have to be attached to your wrist to register your heart rate, it just has to be within 3 feet of your chest.

EXERCISING WITH YOUR HR427

HEART RATE

From Time of Day Mode click MODE button once to go to Heart Rate Mode and begin your exercise. If your transmitter is correctly attached, the running man indicator on the monitor display should begin to blink and your current heart rate in beats per minute will come up on the display. If no heart rate is detected for 5 min. the heart rate circuit will switch itself off. The HR427 Heart Rate Monitor ♥ indicator tells if the heart rate circuit is on. To switch it back on after it has shut off, simply restart the Heart Rate Mode by clicking the MODE button.

THE TARGET ZONE

Your monitor will provide both a visual indicator (by flashing the heart rate digits) and an audible alarm (beeping) if your heart rate is above or below your set target zone range. The "TZ" indicator with the ▲ or ▼ will indicate if your heart rate is within, above or below the set target zone, respectively. The beeping alarm can be turned on or off by pressing the Alarm button (indicated by the ♫ on the display).

USING THE MEMORY RECALL MODE

From the Time mode, click the MODE button 2 times to go to the Recall mode. The upper display will show your Total Elapsed Time for your workout and the lower display will show how much time you have spent in your TZ.

SMART-RECALL DISPLAY

This feature allows you to view the Recall display in real time while the stopwatch is running. To use it during your workout, switch to the Recall mode.

THE STOPWATCH

From the Heart Rate mode simply press the START/STOP button to activate the stopwatch. You can pause and restart by pressing the START/STOP button. You can also press the MODE button to view the Recall or Time modes without interrupting the stopwatch. When you have finished, simply press the STOP button to end the recording. Press the MODE button to proceed to the Recall or Time mode.

QUICK START

This feature instantly takes you to the Heart Rate/Stopwatch mode and starts or stops the stopwatch and recordings from any mode, at one simple press of the START/STOP button.

NITE-SITE NIGHT LIGHT OPERATION

Simply press the LIGHT button once to light the display for 3 seconds.

SMART-LIGHT

Between the hours of 6 PM & 6 AM pressing any button will activate the night light for 2 seconds.

USING THE FITNESS INDEX RECORDING

This feature is used to monitor your fitness efficiency level by monitoring how quickly your heart rate starts to come back down after your workout. As your cardiovascular system improves it will take less and less time for you heart rate to come back down to a resting level after your workouts.

This measurement is automatically activated at the end of your workout when you press the STOP button. To use it correctly, its best to activate it immediately as soon as you have completed your exercise (or as soon as you finish your cool-down).

When you stop the stopwatch, the display will automatically switch to the Fitness Index Mode and begin a 60 sec, countdown timer. During this countdown you should be concentrating on bringing your body down to a comfortable rest, by taking deep slow breaths and relaxing your muscles. When the countdown timer reaches zero, the watch will beep twice and display a number between 0 and 99. The higher this number, the better your recovery rate. Note: The transmitter belt needs to remain attached to your chest for this feature to work.

RESETTING THE STOPWATCH & CLEARING WORKOUT DATA

To reset the Stopwatch and clear workout data, press and hold the RESET button for 3 sec, while in the Heart Rate/Stopwatch mode and with the Stopwatch timer stopped. You will hear a second beep and the stopwatch timer display will go to all zeros. This will allow you to record a new workout starting from zero. Keep in mind that

the previous data will remain in the memory recall displays until it is replaced with new data by restarting the stopwatch and recording a new workout.

TROUBLESHOOTING

Can't get a Heart Rate reading?

The most common cause for the heart rate not turning on or working erratically is that the belt is not positioned correctly or not moistened properly. Make sure that the belt is positioned high enough on your chest (too high is better than too low) and properly moistened. The tension should be comfortable but it shouldn't be so loose that it slides down the chest. Also make sure that your monitor is within the 3ft. transmitting distance of the transmitter and check the angle of its position (at greater distances, the monitor face should be parallel and facing the transmitter, instead of on an angle).

It is also known that a small percentage of the population may have trouble getting an accurate heart rate reading with this type of device due to the many various intricacies of the heart rate signal. The signal may be too weak on the surface of the skin, stronger in a different location of the chest or irregular in waveform. Also, if the user has had recent heart problems, surgery, or other various differentiating factors, they might cause a problem. If you are experiencing difficulties in picking up a steady signal, you may want to try your monitor on another person, or try positioning the belt higher on your chest, or shifting it more to the left or right of your chest (instead of centering the logo).

Blank screen or missing digits?

This can be an indication of mechanical shock damage, a dead battery or possibly moisture damage. If this occurs, you could first try a Global Reset (see below) otherwise send it in for service. Repairs should only be done by a Vetta Dealer or a Vetta service center.

Stuck or Erratic Display?

If your monitor should ever get stuck or act erratically due to dropping it, static shock or some other unforeseen reason, the Global Reset feature will allow you to reset the unit and return all settings back to their internal defaults. To perform this function press and hold both buttons at once. Caution: THIS WILL CLEAR EVERYTHING! including all of your personal settings.

My heart rate readings act strange while in my car or on an airplane.

Though the HR427 is designed with high integrity interference elimination circuitry, extremely excessive electrical or

magnetic fields like those in a vehicle (or on board an aircraft) can cause disturbances in the heart rate readings. When your monitor detects too much interference such as this, it will usually display "00" or "-.-" and eventually turn its heart rate circuit off. The ♥ indicator tells you if the heart rate circuit is on. In most cases, holding the monitor within a foot of the front of the chest belt will allow your monitor to receive the signal and display your heart rate accurately.

My Fitness Index Reads Zero or Low

This feature tracks how quickly your heart rate comes down within one minute's time. If your rate remains the same, increases, or only decreases by a very small amount within that time, it will produce a zero (or a low) reading. To insure a more accurate measurement, it is important to activate this feature at the correct time. If you activate it too soon, such as before you have finished your exercise, there's a good chance that your heart rate could stay high or increase within that time. If you activate it too late, your heart rate may have already reached its resting level and therefore could be higher or nearly or same within that time, (which would also produce a zero or low reading). For best results, activate the Fitness Index recording as soon as you stop your activity and try to completely relax during the countdown recording.

If your monitor should ever get stuck or act erratically due to dropping it, static shock or some other unforeseen reason, The Global Reset feature will allow you to reset the unit and return all settings back to their internal defaults. To perform this function press and hold both buttons at once. Caution: **THIS WILL CLEAR EVERYTHING!** including all of your personal settings.

TAKING CARE OF YOUR HR427

Your Vetta Heart Rate Monitor was built with a commitment to quality and dependability. To extend the life of your monitor and keep it operating at its peak, please read your instructions carefully and keep the following tips in mind.

CARE & MAINTENANCE

- To maximize the life of your heart monitor it is important that you keep all of its components clean and always dry off any moisture before putting it away.
For cleaning, use only mild soap and water. Be careful to never use abrasive cleaners or chemicals as they will cause permanent damage
- For safekeeping, always store your monitor in its original box and in a safe, mild and dry location. Be sure not to expose it to extreme temperatures such as, leaving it in direct sunlight or in a hot or freezing cold car for extended periods of time.

GENERAL PRECAUTIONS

- Although your Heart Rate Monitor is water resistant, be sure not to operate its buttons under water as pressure can cause them to leak.
- The transmitter will automatically shut itself off once you have disconnected it from your chest. However, it is important to thoroughly dry it off after every use, since moisture on the electrodes can cause it to remain on longer.
- Be sure not to twist or bend the electrode portions of the belt excessively (never bend backwards), especially when storing it. This can permanently damage their conductivity and cause mechanical damage to the internal circuit.

BATTERY REPLACEMENT

Should your monitor need battery replacement we recommend that you take it to a local jewelry store or an authorized Vetta Dealer in order to guarantee that it will maintain its water resistance. Improper battery replacement or service will void the warranty. Repairs should only be performed by a Vetta Service Center.

TECHNICAL SPECIFICATIONS

Shock Resistant:	Standard shock resistance.
Water Resistance:	30 meters. Not intended for diving.
Operating Temperature:	0 to 50°C (32 to 122°F)
Battery Type:	Transmitter--Lithium CR2032 Monitor--Lithium CR2025
Battery Life:	Approx. 2 years, avg use of 1 hr/day, 7 days/week.
Memory Recall Items:	Total Elapsed Time, Time in TZ, Fitness Index
Time Default Mode:	After 5 minutes of no key press or no heart rate Monitor returns to the time-of-day Mode.
Global Reset:	This feature will clear all memory data and user settings and return all settings to the default values listed. Press and hold both all three buttons for 2 seconds (Global Reset also happens when battery is replaced.)

TECHNICAL DISPLAY GUIDE

Display Items	Default Settings	Range
Time	8 AM 12/24 hr. clock *AM & PM indicators active only in the Setting Modes.	
Alarm Time	8AM/OFF	ON/OFF
Date	01/01/1996	to 12/31/2095
Age	30 years	7-99
Heart Rate Display		0(20)-250
TZ Alarm	OFF	ON/OFF
Upper Target Zone Limit	162 beats per minute	OFF-250
Lower Target Zone Limit	124 beats per minute	OFF-250
Stopwatch	23:59:59 (rolls over at 24 hours)	
Fitness Index	0	0-99

Note: TZ High cannot be set less than TZ Low and TZ Low cannot be set greater than TZ High. However, they can be set within 1 beat of each other, or either one can be set to OFF.

WARRANTY & SERVICE

WARRANTY

The Vetta companies, including Vetta USA Limited and AH Vetta Europe Limited, warrant all Vetta products, to the original purchaser, to be free of defects in materials or workmanship for a period of three years from the original date of purchase. Vetta will, at its sole discretion, repair or replace any product deemed defective. This express warranty is in lieu of all other warranties, either expressed or implied. Any warranties of merchantability or fitness for a particular purpose are limited to the three years duration of the above express warranty. Vetta will not be held liable for any incidental or consequential damages, including but without limitation damage or injuries resulting from possible measurement inaccuracies or malfunctions.

SERVICE

If you ever experience a problem with the function of your Vetta HR427 Heart Rate Monitor, please visit your local Authorized Vetta Dealer for assistance.

Should you experience a problem with your Vetta HR427 Heart Rate Monitor that can not be solved by your local Authorized Vetta Dealer, please follow these simple steps to assure quick and efficient processing of your claim.

Step 1 Contact the appropriate Vetta Customer Service Center listed below for help and to obtain a Return Authorization Number (RA Number).

Step 2 Send the unit back to the appropriate Vetta Customer Service Center, together with the original copy of your purchase receipt and a detailed explanation of the problem that you are experiencing. Please be sure to write the Return Authorization Number (RA Number) on your return package.

VETTA CUSTOMER SERVICE CENTERS

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