

## SPECIFICATIONS

### Watch Receiver:

- Heart Rate Range 30 to 240 beats per minute
- Heart Rate Accuracy  $\pm 1$  beat per minute
- Operating Temperature 0°C ~ 50°C
- Storage Temperature -14°C ~ 70°C
- Battery 3 volt lithium 2032 cell
- Weight 30.6 grams

### Transmitter & belt:

- Emitted Frequency 5KHz  $\pm 10\%$
- Battery 3 volt lithium 2032 cell
- Weight (including belt) 4 oz.
- Adjustable Chest Belt



## HEALTH NOTICE

This BioFlash LED Monitor is not a medical device. This product is only for displaying and monitoring the intensity of your walking activity, and it is not intended by any means for any type of medical diagnostic purposes or any prevention of health problem.

Before you begin any exercise program with this product, please consult with your doctor or physician, especially if you have been inactive for a period of time, have a history of cardiac illness, smoke, have high blood pressure, over-weight, and/or under any special medical conditions. If you use a pacemaker, please do "NOT" use a BioFlash LED monitor until you consult with your doctor. No claims are made of guaranteed health or fitness benefits from the use of this product.

## FEATURES:

### Watch Function Comparison

- Time of the Day
- Day and Date Calendar
- Stop Watch
- Water Resistant for All Sport
- Easy to Read Large Display

### HR Function Comparison

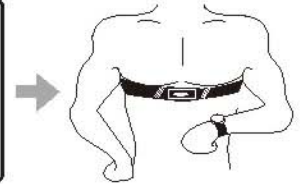
- ECG Accurate
- Current Heart Rate
- Average Heart Rate
- Max. Heart Rate
- Adjust Heart Rate Limits
- Out of Target Zone Alarms
- One-Touch Button for Audible Alarm

### Special Function Comparison

- Calories Burned
- User Changeable Batteries (Transmitter and Receiver)
- Comfortable Ultra-slim Ergonomic Chest Belt Transmitter
- State-of-art Stylish Wrist Watch Design
- HR Measurement with Flash Light
- LED blink in green indicates in the zone
- LED blink in red indicates over the upper limit
- LED blink in yellow indicates under the low limit

## How to wear your Athletic Watch

The transmitter should be positioned just below the breast or pectoral muscles with the logo centered on the chest, and facing out. The transmitter will begin sending a signal as soon as it is worn.

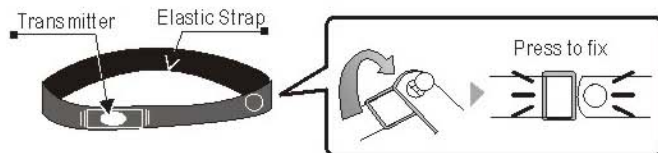


### Adjusting the Strap

The strap should be worn tight enough to prevent the transmitter from bouncing or sliding, but not so tight as to be uncomfortable.

## Moisture Transmitter Contacts

Before wearing the transmitter strap, moisture the 2 rectangular rubber pads (electrodes) located on the inside surface of the chest transmitter. Use water or saliva to moisten these pads.



- Note:**
- Do not use Pulse Watch near high voltage power cables.
  - The electrodes in the strap need to be moistened.

## Wrist Monitor Placement

The wrist monitor is worn on your wrist like a conventional watch. You also have the option of strapping the monitor to your bicycle handlebar or exercise machine. The monitor should be placed within 30" of the transmitter to receive a consistently strong signal. A foam band is included for mounting the monitor to your bike handlebars.

Reminder: To Activate the Heart Rate Monitor you must press the button to activate the pulse readout.

## Checking for a Signal

If you do not receive a display, first try applying more moisture to the rubber pads, and repositioning the transmitter until the heart begins blinking on the display. Sometimes it is necessary to shift the transmitter to the left, or move it down further on the chest to get a better transmission signal.

## Avoiding Interference

Your heart rate monitor receives a signal from the transmitter. As with most electronic receiving devices, there can sometimes be interference that causes inaccurate display readouts. Avoid using your heart rate monitor near common sources of interference. These include high voltage power lines, air conditioning motor units, fluorescent lights, wristwatches, and computers.

One of the first steps to using a heart rate monitor is to determine your target heart rate zone. It is always best to consult with your physician first, and it is especially important if you have a history of heart problem. Never use a heart rate monitor if you have a pacemaker without first consulting your physician. Below are some general guidelines for your reference.

## Target Heart Rate Zone

The most common method for calculating your target heart rate is to first find your maximum heart rate. The standard formula for this is:

$$220 - \text{Your Age} = \text{Maximum heart rate.}$$

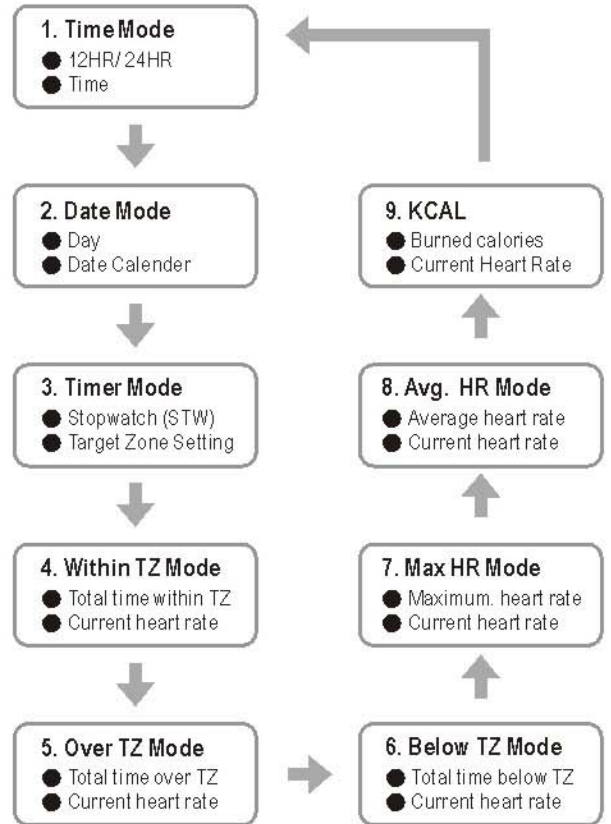
You do not want to workout at your maximum heart rate; you want to workout in your Target Heart Rate Zone. Your Target Heart Rate Zone is a percentage of your maximum heart rate. The American Heart Association recommends working out at a Target Heart Rate Zone of between 60% and 75% of your maximum heart rate. If you are just beginning an exercise program, exercise between 50% and 60% of your maximum heart rate. If you have already been exercising regularly and are looking to improve your performance, you can consider exercising in the athletic Target Heart Rate Zone of 75% to 90% of your maximum heart rate. You may find the chart below helpful for a quick reference.

## TARGET HEART RATE TRAINING ZONE BY AGE & LEVEL

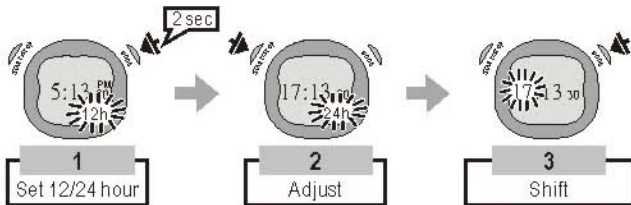
AGE	BEGINNING	AEROBIC	ATHLETIC
	50%-60% MAX	60%-75% MAX	75%-90% MAX
20	100-120	120-150	150-180
25	97-117	117-146	146-175
30	95-114	114-142	142-171
35	92-111	111-138	138-166
40	90-108	108-135	135-162
45	87-105	105-131	131-157
50	85-102	102-127	127-153
55	82-99	99-123	123-148
60	80-96	96-120	
65	77-93	93-116	
70	75-90	90-113	

## Mode Change

Press "MODE" button to change mode.

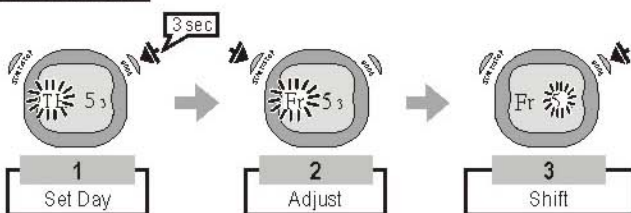


## Time Mode



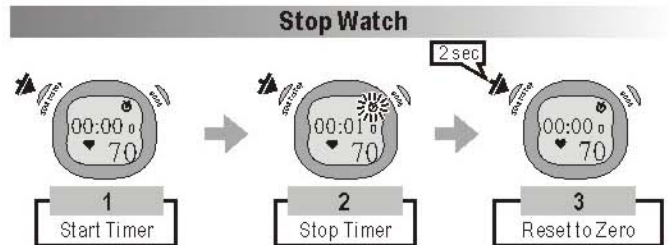
- Repeat 2 & 3 to set 12HR/24HR/ Hour/ Minute/ Second, and press "MODE" for 3 seconds to complete the setting or wait without any pressing operation for 1 minute.
- When press the "START/STOP" key to set seconds, it will display zero. (If the seconds are greater than 30, the minutes will increase by one.)

## Date Mode



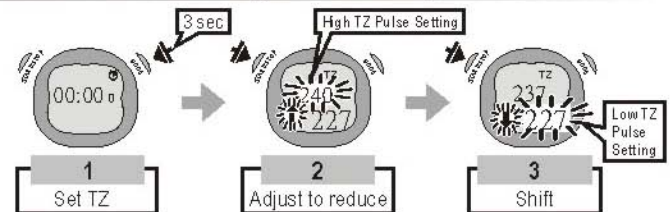
- Repeat 2 & 3 to set week day/ Month/ Date, and press "MODE" for 3 seconds to complete the setting or wait without any pressing operation for 1 minute.
- The watch does not make any allowance for leap years. Be sure to manually set February 29 (when one occurs) to the appropriate date.

## Timer Mode



- The maximum time displayed is 9:59:59 (hr: mm: ss).

## Target Zone Setting



- Press "START/STOP" key to adjust TZ value, and if hold this key, the digits will adjust by 5 BPM increments.
- The heart watch automatically maintains a 10 BPM separation between the upper and lower target settings. Therefore, you may notice that the upper and lower settings move simultaneously whenever there is only a 10 BPM difference.
- Press "MODE" key for 3 seconds to back Timer.

**Note:** Please refer to "Heart Rate Training Guide" at page 10 to set your suitable TZ.

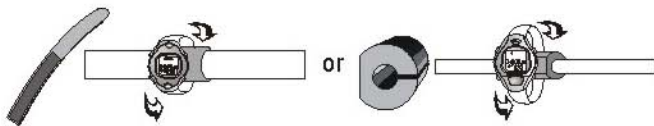


When the heart rate subsides the LOW limit, the LED will blink in YELLOW, which indicates that you are BELOW THE LIMIT.



When the heart rate is within the HEART RATE ZONE, the LED will blink in GREEN, which indicates that you are IN THE LIMIT. Now you can simply see the LED colors to know your HEART RATE CONDITIONS.

## BIKE ADAPTOR



## MAINTENANCE

### 1. The elastic strap:

The strap can be rinsed in surface fresh water or washed with a mild soap. Never scrape strap to wear out may need to be replaced when worn out.

### 2. Transmitter:

Never scrape the rubber electrode surface. The first signs of a worn out transmitter are often erratic heart rate numbers which jump up and down. To extend the life, avoid bending the electrodes.

### 3. Watch

If the display contrast changes and figures become faint, it's time to replace the watch battery. Consider changing the watch and transmitter batteries at the same time.

**NOTE:** Do not expose your Athletic Watch to extremely cold or hot temperatures. For example, do not leave your unit in your car in direct sunlight.

### 4. Batteries and Battery Replacement:

#### Transmitter:

Unscrew the battery cover located on the back of the transmitter. Remove the new battery, model CR2032, with the (+) side facing up. Replace the cover and tighten screws.

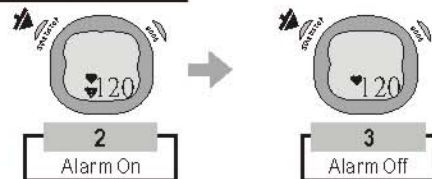
Unscrew the four screws on the stainless steel back cover closely at the battery. After removing the housing, unscrew the inside two small screws located at the 4 o'clock and 8 o'clock positions.

Gently remove the battery and replace it with a new battery, model CR2032, the (+) side facing up.

**NOTE:** Be careful not to over tighten and "strip" the casing.

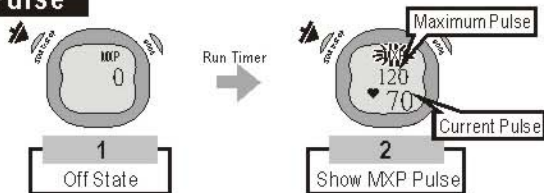
**NOTE:** Please do not do any physical damages to the unit (watch & chest belt).

## Sound Alarm for TZ



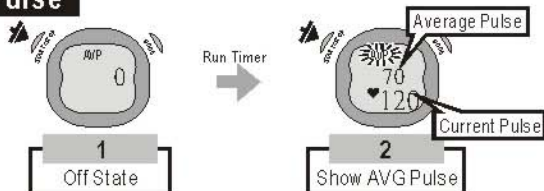
- Press the "S/S" key first to activate the function if the alarm symbol doesn't show up.
- A continuous alarm will sound every you exit, either above or below the programmed target heart rate zone. An arrow will flash to visually indicate that your heart rate is either above or below the selected target zone. You can see the upper & lower target zone by pressing the MODE key.

## MXP Pulse



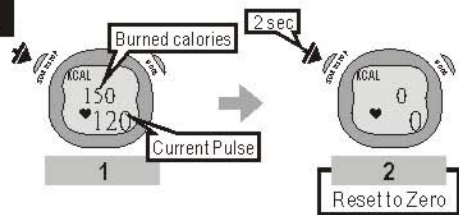
- The maximum heart rate will display 0 as long as the Timer is cleared.

## AVG Pulse



- The average heart rate will display 0 as long as the Timer is cleared.

## KCAL



- If one did not clear the value of calories, the value of calories consumption will be accumulated.
- Press "MODE" key for 3 seconds, the screen will go to Gender setting, then Press "S/S" to shift. When finish, press "MODE" key to go on to Unit setting, then press S/S key to shift. When complete, press "MODE" to shift Number. Then, press "S/S" key to adjust.

## LED

If you choose LED light mode, then each blink bright LED indicates every HEART BEAT to show your HEART RATE in COLOR ZONE!



When the heart rate exceeds the HIGH limit, the LED will blink in RED, which indicates that you are OVER THE LIMIT.

## TROUBLESHOOTING

### 1. Heart rate does not show up:

Make sure that you have good contact between the electrodes and your skin. Re-moiste the electrodes. Make sure your chest belt fits securely and is properly positioned at the center of the chest. The transmitter battery may be worn out. Replace the battery. Make sure the battery is installed correctly with the (+) side facing up.

### 2. Display is black or very light:

The battery power may be low. Try a new battery--make sure the battery is installed correctly.

### 3. Display becomes dark or black:

The unit is too hot. Place the unit in a shaded area, and it should return to normal.

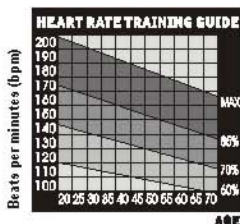
### 4. The unit operates slowly or struggled:

The unit is too cold. Warm the unit, and it should return to normal.

### 5. Heart rate varies enormously:

Make sure your chest belt fits securely and is properly positioned at the center of the chest.

Check your surroundings for electro magnetic or high energy interference and move away from the source of interference.



#### Training Areas:

- 50% - 60% Maintain Fitness
- 60% - 70% Endurance
- 70% - 80% Slight Resistance
- 80% - 90% Sustained Resistance

Maximum Pulse Limit (MPL/bpm) = 220 - Age

For Maintain Fitness TZ setting:

Max HR = 60% \* MPL

Min HR = 50% \* MPL

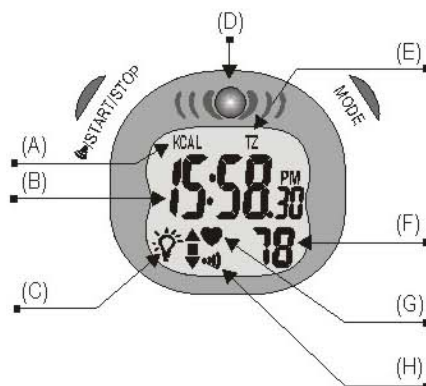
- Target zone will vary for each individual, depending on Age, Personal fitness goals, Existing health considerations (High blood pressure, circulation or respiration), Medications and Doctor's recommendations.

## LIMITED WARRANTY

This product is for one year limited warranty commencing on the date of purchase. The product will be free from defects in material and workmanship for one year from the date of purchase.

- Warranty does not cover the batteries, damages due to misuse, abuse or accidents, cracked or broken cases, negligence of precautions, improper maintenance or commercial use.
- Warranty is void if the repairs are done by not authorized service technician.
- The warranties contained herein are expressly in lieu of any other warranties including implied warranty of merchantability and / or fitness for purpose. In no event shall manufacturer be liable for any damages, direct or incidental, consequential or special, arising out of or related to the use of this manual or the products described herein.
- During this warranty period ( one year) the product will either be repaired or replaced without charge.

## BioFlash Heart Rate Monitor



- (A) ----- Calories Burned
- (B) ----- Time/Day/Date Calendar
- (C) ----- LED Flash Light For TZ
- (D) ----- LED Indicator
- (E) ----- Target Zone Setting
- (F) ----- Current HR
- (G) ----- Blinks When measuring HR
- (H) ----- Sound Alarm For TZ